From: (b) (6) 1
To: (b) (6)

Subject: FW: Thank you

Date: Monday, February 02, 2015 2:51:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b) (7)

Understand from Mr. Ryan that your department is looking into information on operating a small unmanned aircraft system in support of emergency services for your department. As an introduction, my name is contractor with (b) (6) . I am a contractor with (b) (6) . Working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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-----Original Message-----From: Ryan, Jim (FAA)

Sent: Monday, February 02, 2015 6:47 AM

To: Steventon, John (FAA); (b) (6)

Subject: FW: Thank you

(b) (6)

(b) (6), (b) (7)(C) is a with the Citrus Heights California Police Department. (Which happens to be the same department my nephew works for). She is doing a preliminary look at the feasibility of getting Unmanned Aircraft for their department. I spent a few minutes with her on the phone explaining that they should begin with determining what they want to use the aircraft for, which will drive the type of aircraft they may want to purchase. I also explained the two step COA approval process we use for law enforcement.

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Would one of you do me a favor and reach out to (b) (6). (b) and provide her with contact information for some of her counterparts. You may also want to provide her with the contact information for the people she could contact at DOJ/ NIJ.

Her email is (b) (6) . If you need a phone number, I will call my nephew to get on for you.

Thanks much guys.

Jim

----Original Message----

From: (b) (6)

Sent: Friday, January 30, 2015 11:29 AM

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(b) (6), (b) (7)

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA); Ryan, Jim (FAA)

Subject: FW: Thank you

Date: Monday, February 02, 2015 2:46:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

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From: (b) (6) To: (b) (6)

Subject: FW: Spotsylvania Sheriff's Office

Date: Wednesday, January 28, 2015 3:19:00 PM

Attachments: image001.jpg

Aircraft Registration.docx

<u>COA Process Initial Itr Template.doc</u> Order 8900 1 Volume 16.docx

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We did have some communication with Sgt. Sell back in October 2014 on operating a UAS in the NAS. I have copied him on this email. And a quick answer to your question on having a private pilot certificate is yes. It is important to operate within 5 NMs of an Airport or heliport regardless of the Class of airspace. See Order 8900.1 attachment.

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From: Steventon, John (FAA)

Sent: Wednesday, January 28, 2015 11:44 AM

To(b) (6)

Subject: Spotsylvania Sheriff's Office

Steve,

(b) (6), (b) from the Spotsylvania Sheriff's Office would like the letter and info for how to obtain a COA for their program.

John

John D. Steventon Aviation Safety Inspector HQ, Federal Aviation Administration Unmanned Aircraft System Integration Office, AFS-84 490 L'Enfant Plaza, Suite 3200, Washington DC, 20024

Phone: (202) 267-8143

E-Mail: john.steventon@faa.gov

From: (b) (6), (b) (7)(C)

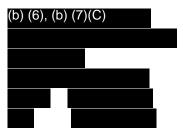
Sent: Wednesday, January 28, 2015 2:35 PM

To: Steventon, John (FAA)

Subject:

John

Thank you for returning my call and please send me the necessary information for the application process



This E-mail may contain sensitive law enforcement and/or privileged information. If you are not the intended recipient (or have received this E-mail in error) please notify the sender immediately and destroy this E-mail. Any unauthorized copying, disclosure or distribution of the material in this E-mail is strictly forbidden.



From: (b) (6)
To: (b) (6)
Cc: Steventon, John (FAA)

Subject: Operating a UAS in The National Airspace System

Date: Wednesday, February 04, 2015 8:24:00 AM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

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So this is the information we give to public agencies that are considering operating an unmanned aircraft system in the NAS.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft

registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- 1. An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: (b) (6)

To: (b) (6)

Cc: Steventon, John (FAA)

Cc: <u>Steventon, John (FAA)</u>

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Monday, January 26, 2015 3:22:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6)

First let me apologize for not responding to you in a timelier manner. As a way of introduction, my name is (b) (6)

I am a contractor with (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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mitigate any attendant hazard for UAS)

• An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,
(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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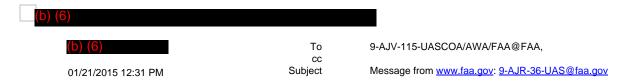
From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, January 21, 2015 4:24 PM

To: (b) (6) Cc: (b) (6)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. Steve Pansky, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

Hello: I am the Team. We (b) (6), (b) (7)(C) for Redding (CT) Police Major Accident investigation o use a Phantom 2 Vision Plus for day, VFR, MVA investigations and other authorized purposes. We are a rural community. Our trained Phantom pilots are members of AMA and fly using FAA and AMA guidelines. Our "chief pilot" is a retired commercial pilot, flight instructor and ground instructor. (No current medical). We use dual transmitters for safety and pilot backup, spotters and work in areas restricted form public access. A small section of our community is within five miles of a part time tower. We have discussed procedures with them.
We'd like to apply for a waver. We have received the FAA request for help with UAV investigations and have trained officers to do that.

. How do we begin the proces , Redding Police Department (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

From: (b) (6), (b) (7) (C).
Cc: Steventon John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Tuesday, January 27, 2015 8:27:00 AM

Attachments: Aircraft Registration.docx
COA Process Initial Itr Template.doc
Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6), (b) (7)(C)

Metropolitan Transportation Authority Police Department

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To answer your question.....Can I apply for a Certificate of Waiver or Authorization (COA) before buying the UAS? The answer is no. The FAA requires that he proponent have the UAS registered before hey submit a COA for approval. The information below will help in getting the registration approved.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Senior Aviation Analyst

Air Traffic and Law Enforcement (b) Liaison Supporting

Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Monday, January 26, 2015 11:01 AM

To: (b) (6), (b) (7)

Subject: Ré: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

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This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/about/office.org/headquarters offices/ato/service units/systemops/aaim/organizations/uas/coa/

Subject

Message:

The Metropolitan Transportation Authority Police Department is the police agency of New York's Metropolitan Transportation Authority. Officers of the MTAPD are fully empowered under the New York State Public Authorities Law and are commissioned in the state of Connecticut. Its jurisdiction extends across fourteen counties in two states, covers approximately 5,000 square miles, including New York City, Long Island, southeastern New York State and southern Connecticut, and serves a population of 14.4 million people. I am currently interested in purchasing a UAS for use by our department. Can I apply for a Certificate of Waiver or Authorization (COA) before buying the UAS? Any assistance or further information would be greatly appreciated.

(b) (6), (b) (7)(C)

From:

To:

(b) (6), (b) (7)(C)

Cc:

Steventon_John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Tuesday, January 27, 2015 8:35:00 AM

Attachments: Aircraft Registration.docx
COA Process Initial Itr Template.doc
Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- 1. An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
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communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).

4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or County Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement/(b) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(D) (O)

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Monday, January 26, 2015 11:10 AM

To: (b) (6), (b) (7)(C)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr (6) (6) which will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and he COA process.

90917---01/26/2015 10:55:44 AM- (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

To cc 9-AJV-115-UASCOA/AWA/FAA@FAA,

01/26/2015 10:55 AM

Subject

Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Message:

I wanted to inquire as to the rules and regulations for operating a UAS. I am(b) (6), (b) (7)(C) with the Buffalo County Sheriff's Office in Nebraska and we currently own a Parrot AR.Drd ice does not fly near as high and the 400 foot regulations I noticed for model airplanes, but I was curious if you still require or suggest a COA to operate it? And my main question would be what are the rules and regulations for operating a UAS without a COA (if that's an option) and the rules a regulations for operating a UAS with a COA, as we may be acquiring a larger/better UAS in the future.

Thank you for your time,

(b) (6), (b) (7)(C)

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA)

Subject: RE: COA Application process

Date: Monday, January 26, 2015 4:07:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

First let me apologize for not responding to you in a timelier manner. As a way of introduction, my name is (b). I am a contractor with (b) (6) working for the Fede (a) Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, January 22, 2015 7:31 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA Application process

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

-----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, January 20, 2015 2:43 PM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6

Subject: COA Application process

Good Afternoon, My name is (b) (6), (b) (7) and I am the (b) (6), (b) (7)(C) for the Will County Sheriff's Police, Special Operations Group in Illinois. We have recently purchased a drone to use for high risk call outs ie: Hostage situations, "No-Knock" search warrants, etc. Furthermore the drone would be utilized for surveillance if need on our numerous critical infrastructures, refinery's, Nuclear plants and chemical plants in case of foreign or domestic attacks as well as work place violence. I would like to start the process of obtaining a COA. Please contact me at your earliest convenience to discuss this process. Thank You.



From: (b) (6) (c) (7)(C)

Cc: Steventon, John (FAA)

Subject: RE: COA Request

Date: Wednesday, February 04, 2015 8:20:00 AM

Attachments: <u>Aircraft Registration.docx</u>

COA Process Initial ltr Template.doc Order 8900 1 Volume 16.docx

image001.jpg

(b) (6), (b) (7)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft

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Respectfully.

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, February 03, 2015 3:13 PM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: COA Request

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Monday, February 02, 2015 4:29 PM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6)

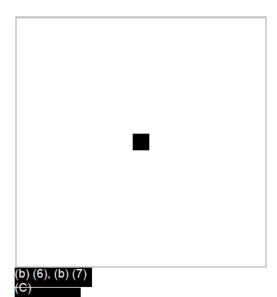
Subject: COA Request

Ms. Dina,

I received an email on this date. I am forwarding this email to you per the instructions. The Hopkinsville Police Department would like to experiment with the use of the below pictured drone system in some of our day to day LE activities.

Thank You for your time.

- 1) Hopkinsville Police Department, Hopkinsville, Kentucky
- 2) DJI Phantom Aerial UAV Drone Quadcop Multi rotor system with Go Pro Mount
- 3) COC: We would like to utilize this system to search for evidence on roof tops, get a close overhead video/photo of crime scenes and traffic collision scenes, search for missing/endangered persons and or children.



Hopkinsville Police Department

(b) (6), (b) (7)(C)

All email correspondence are reserved for attorney/client privilege

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: RE: COA

Date: Monday, January 26, 2015 4:00:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6), (b) (7)(C)

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the

requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to **training and evaluation** activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- · A review of the agency's UAS training and proficiency program, to include all training records
- · A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- · A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to

mitigate any attendant hazard for UAS)

· An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

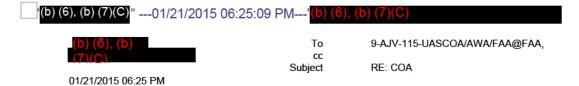
Sent: Wednesday, January 21, 2015 4:30 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



It will be used for flights under around 300 feet line of sight. It will be used to assist in photographing complex outdoor crime scenes and major traffic accidents.

From: <u>Dina.Reyes-Garcia@faa.gov</u> [<u>mailto:Dina.Reyes-Garcia@faa.gov</u>] On Behalf Of <u>9-AJV-115-</u>

UASCOA@faa.gov

Sent: Wednesday, January 21, 2015 5:22 PM

To: (b) (6), (b) (7)(C) **Subject:** Re: COA

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.



To9-AJV-115-UASCOA/AWA/FAA@FAA, cc SubjectCOA

01/08/2015 01:59 PM

I am trying to get access to the COA website. My department was given a remote control helicopter with a camera mounted on it. We are hoping to use it to photograph large crime scenes and traffic accidents.



From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Morra, Joseph (FAA); Steventon, John (FAA); (6)

Subject: RE: Contact for UAS agency

Date: Wednesday, January 28, 2015 4:34:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be

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Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- 1. An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
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- crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:
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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6)

Sent: Wednesday, January 28, 2015 1:20 PM

To: Steventon, John (FAA); (b) (6)

Cc: Morra, Joseph (FAA)

Subject: FW: Contact for UAS agency

Best,

(b) (6) (b) (6)

FAA Aviation Safety (AVS)

UAS Integration Office (AFS-80)

(b) (6)

(b) (6)

www.faa.gov/uas

From: (b) (6)

Sent: Wednesday, January 28, 2015 4:12 PM

To: Morra, Joseph (FAA)

Cc: (b) (6)

Subject: FW: Contact for UAS agency

Can we provide (b) (6), (b) (7)(C) that info?

Regards,

(b) (6)

From: (b) (6), (b) (7)(C)

Sent: Wednesday, January 28, 2015 4:00 PM

To: (b) (6)

Subject: Contact for UAS agency

(b) (6)

I am requesting contact information for a Law Enforcement agency that has a COA in place to operate UAS's. My Department, in Virginia, has 644 officers if that helps. We are in the beginning stages of discussion regarding the use of UAS's and I'd like to contact a Department that has already gone through the process. I appreciate any help you may provide.

Thank you, (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

Prince William County Police
(b) (6), (b) (7)(C)
(b) (6), (b) (7)(C)

From: (b) (6) To: (b) (6)

 Cc:
 Steventon, John (FAA)

 Subject:
 RE: UAS COA Online System

Date: Monday, January 26, 2015 6:43:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law
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Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the
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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
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Respectfully,
(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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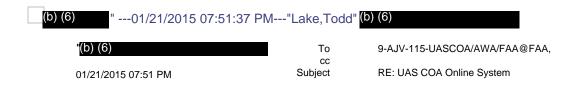
From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Monday, January 26, 2015 10:47 AM

To: (b) (6) Cc: (b) (6)

Subject: RE: UAS COA Online System

Thank you. Your case has been assigned to Mr. (b) (6) who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



(1) Warren County, PA Department of Public Safety in cooperation with the North West PA Emergency Response Group comprised of the Counties of Erie, Crawford, Venango, Forest and Warren.

- (2) DSLR Pros Night hawk Thermal P2 Aerial Kit with the latest version of the Phantom 2 (v2.0) with new ESC, 9450 Props, and Anti-static Compass.
- (3) Concept of operations would be for situational awareness during emergency and disaster situations including large wildfires, Hazmat incidents, large scale structure fires, and possible large event security.

Please let me know if you have any additional questions.

Thank you,

(b) (6)

From: 9-AJV-115-UASCOA@faa.gov < 9-AJV-115-UASCOA@faa.gov >

Sent: Wednesday, January 21, 2015 7:05 PM

To:(b) (6)

Subject: Re: UAS COA Online System

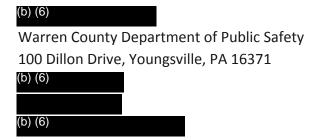
Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.



To whom it may concern:

I am looking for assistance on obtaining an account in order to access the online system for COA. We are in the process of obtaining a UAS to use for Public Safety in the NW part of Pennsylvania. Please let me know what the process is to obtain the account.

Thank you,



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From: (b) (6)

To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA); (b) (6)

Subject: RE: UAS questions for Law Enforcement
Date: Monday, January 26, 2015 5:36:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

First let me apologize for not responding to you in a timelier manner. As a way of introduction, my name is (b) (6)

[b] I am a contractor with (b) (6)

Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

To answer your questions.....

1. You have several members of the SWAT team that would need to be able to operate this equipment. Does this mean each member would have to register to fly the UAV? What qualifications do they need to attain to operate the UAV (if any)?

The application addresses the training and medical certifications for any individual that wishes to operate the UAS as the Pilot in Command or the Observer. If the members of your SWAT team meet the provisions as addressed in the Certificate of Waiver/Authorization (COA) then they could operate the UAS. The qualifications are addressed in attachment 8900.1 Volume 16.

2. We haven't employed these devices yet and are in the information gathering stages only however; some of the advantages of this technology seem apparent and I would like to begin the cursory steps needed to approach this correctly. Where would I get started?

The information below will assist you in getting started.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- 1. An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

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SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)

 An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

b) (6)

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----Original Message-----

From: (b) (6)

Sent: Friday, January 23, 2015 1:05 PM

To: Steventon, John (FAA); (b) (6)

Subject: FW: UAS questions for Law Enforcement

Gentlemen, not sure what department he's from but over to you.

Best.

(b) (6)

(b) (6)

FAA Aviation Safety (AVS)

UAS Integration Office (AFS-80)

(b) (6)

www.faa.gov/uas

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Friday, January 23, 2015 4:01 PM

To: Forro (b) (6)

Subject: UAS questions for Law Enforcement

(b) (6)

I was directed to this email from calling the help line, and being transferred around various desks.. so I hope I have the right person! I am researching the process(s) for operating a UAS (UAV) with a camera for SWAT operations in rural and urban areas. After researching the FAA website and information I could find online, I understand I need to register the craft and receive an "N" number for its hull. However, we have several members of the SWAT team that would need to be able to operate this equipment. Does this mean each member would have to register to fly the UAV? What qualifications do they need to attain to operate the UAV (if any)?

The UAV were looking at is the small kind you can buy in a hobby store. We don't break a 200 feet ceiling and always have eyes on the UAV when we're operating it. Our plan is to have the UAV to look behind obstacles that can't be cleared on a hillside safely or quickly in a high risk scenario. The other deployment is for an urban environment, during a high risk scenario (hostage/barricade), looking inside windows or clearing backyards of dogs/booby traps/obstacles etc.

The UAV isn't for collecting evidence, flying out of sight, or traversing miles of territory to reach a destination. Just for SWAT call outs where we would normally have to negotiate obstacles to gain a safe approach to handle the current problem using the traditional means of personnel and/or K-9 units, robots, cameras.

We haven't employed these devices yet and are in the information gathering stages only however; some of the advantages of this technology seem apparent and I would like to begin the cursory steps needed to approach this correctly. Where would I get started?

Thank you very much for your time,

(b) (6), (b) (7)(C) Vista COPPS Team/SRT (b) (6), (b) (7)(C)
 From:
 (b) (6)

 To:
 (b) (6), (b) (7)(C)

 Cc:
 Steventon, John (FAA)

 Subject:
 RE: UAS Questions

Date: Wednesday, January 28, 2015 10:08:00 AM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc

Public Declaration Letter Template Example.docx

So let me start off by introducing myself. My name is (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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To answer your question, the first "Tall Pole I the Tent" is the public declaration letter that declares your agency as a political subdivision of the state of Michigan (See information two paragraphs below).

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement/(b) (6) Liaison Supporting

Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Wednesday, January 28, 2015 5:28 AM

To: (b) (6)

Subject: RE: UAS Questions

Good morning (b) (6)

Thanks for the quick response! Yes, I would like to at least start the process so that once we do decide upon/purchase a unit we'll be that much further along. If it helps at all now, you should be aware that the Michigan State Police has graciously agreed to allow the Lansing Police Department to use their already FAA approved flight operations training area, as it is only about ten minutes away from our department. That information is located within their COA, (2013-CSA-106-COA). Just let me know what else I need to do to get started. Thanks for the help (b) (6)

(b) (6), (b) (7) (C)

From: (b) (6)

Sent: Tuesday, January 27, 2015 6:13 PM

To (b) (6), (b) (7)(C)
Subject: RE: UAS Questions

(b) (6), (b) (7)

We can start the COA process however once you have been given access to the COA online program and start to complete the application you will not be able to submit the application to the FAA for processing until the registration is denoted in the application.

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcemen(b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, January 27, 2015 11:27 AM

To: (b) (6)

Subject: UAS Questions

Good afternoon (b) (6)

My name is (b) (6), (b) (7)(C) of the Lansing (MI) Police Department. I have been doing research on the possibility of obtaining an Unmanned Aerial System for use by our department. (b) (6), (b) (7)(C) of the Michigan State Police provided me with your contact information. Our department has yet to decide on which model of UAS to purchase, as the model is largely dependent on what next year's budget is.

My question is: Is it necessary for the department to have a decision made on which model of UAS it will purchase prior to a request for a Training COA? I'm having difficulty in finding that answer. The COA's that I have seen all have the make and model of the UAS listed in them. Since we have not yet settled that issue for our department, I don't want to waste anyone's time in submitting an incomplete COA request. However, I would like to have as much of the paperwork process done so that once it is purchased we can expedite getting it operational. Any assistance you can offer would be greatly appreciated. Thanks for your time.

(b) (6), (b) (7)(C)

Lansing Police Department
(b) (6), (b) (7)

From: To: (b) (6), (b) (7)(C) Cc:

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Monday, January 26, 2015 3:57:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6), (b) (7)(C)

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Let me respond to your questions.

What constitutes a "particular area" for example, is it a one mile radius of Interstate 40 mile post 122 or is it the State of New Mexico?

You will see in the information below that we initially have the proponent identify a training location to train in the use of the UAS in support of safety missions. Once they feel confident that they can actually perform actual missions they request a second COA that is for the entire jurisdiction that they wish to operate within. In your case it's the entire state of New Mexico. We are currently working with two other states with this same request and what we have done is to first initially give them approval for only Class G airspace with is typically about 95% of the state with a plan to address the more complex airspace as we move forward. For the purposes of a particular operating area we have the proponent identify what we call a defined incident operating area (Typically either a .25 or .5 NM radius) every time they go out to fly a mission. That defined incident perimeter protects all movement of persons within that area to ensure safety of flight while the UAS is operational.

What constitutes a populated area? is it one person?, one residence?, a hamlet? town? or city? An FAA navigation chart will depict yellow highlighted areas that are considered populated areas however with the defined incident operating area we can mitigate that definition.

Does the COA cover multiple operations or do we need a separate COA for each mission?

A COA is written to a specific agency, a specific unmanned aircraft system and for a specific location. Once approved the proponent can operate as many times as they want so long as they meet the provisions of the COA.

So please take a few minutes to review the below information that speaks to what I have discussed below.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Respectfully,
(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement, (b) (6)
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, January 21, 2015 4:27 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

(b) (6), (b) (7)(C) -01/21/2015 03:52:01(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

CC Subject

01/21/2015 03:52 PM Subject Message from <u>www.faa.gov</u>: <u>9-AJR-36-UAS@faa.gov</u>

9-AJV-115-UASCOA/AWA/FAA@FAA,

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

I am doing research into nosshly proguring a

I am doing research into possbly procuring a UAS for the New Mexico State Police. I had a few questions on the requirements for a COA. First, what constitutes a "particular area" for example, is it a one mile radius of Interstate 40 mile post 122 or is it the State of New Mexico? What constitutes a populated area? is it one person?, one residence?, a hamlet? town? or city?

Does the COA cover $\hat{\text{multiple}}$ operations or do we need a separate COA for each $\hat{\text{mission}}$?

I appreciate your assisstance with these questions.

(b) (6), (b) (7)(C)

From: (b) (6

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA); Rigol, Henry (FAA)

Subject: FW: Online COA access

Date: Wednesday, February 25, 2015 1:47:03 PM

Attachments: image003.jpg

Aircraft Registration.docx

<u>COA Process Initial Itr Template.doc</u> <u>Order_8900 1 Volume 16.docx</u>

(b) (6), (b) (7)(C)

Special Operations Division Westwego Police Department

(b) (6), (b) (7)(C)

I apologize if you did not receive any feedback from the FAA on your request and I just received this email through Ms. Reyes-Garcia so I am not familiar with your question but let me give you the basic information on operating a small unmanned aircraft system (UAS) in the National Airspace System (NAS).

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
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 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
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 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ

to mitigate any attendant hazard for UAS)

 An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(D) (b)

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From: Reyes-Garcia, Dina (FAA)

Sent: Sunday, February 22, 2015 9:25 PM

To: (b) (6)

Subject: FW: Online COA access

(b) (6)

Has this individual gone thru you?

d/

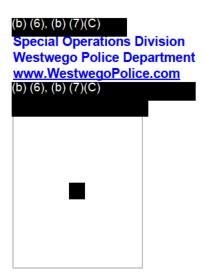
From: (b) (6), (b) (7)(C)

Sent: Wednesday, February 11, 2015 4:15 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** Online COA access

I requested an COA online access in November of 2014. I was wondering if there was any update on the status of my request.

Thank You,



From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA)

Subject: Public UAS Certificate Process

Date: Tuesday, March 03, 2015 12:55:15 PM

Attachments: graycol.gif

pic00491.gif Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.png image002.png

(b) (6), (b) (7)(C)

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) an Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA) on behalf of 9-AJV-115-UASCOA (FAA)

Sent: Tuesday, March 03, 2015 8:52 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

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(b) (6), (b) (7)(C)

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Message:

Sirs, I am a (b) (6), (b) (7)(C) with the Readingnorthern Railroad Police Dept. I have been asked to into the use of a drone for the railroad. We operate in 9 countys on Pa. and cover 390 miles of track. We work with shipping of different materials along with tank cars involving oil. The drone

would assist in a big part of the safety of the railroad in both shipping and rail service. I know about the 400 ft. and keeping the unit in sight. I need to know what is needed and if it is possiable befort we go one. Thanking you in advance for your help and assistance.

(b) (6), (b) (7)

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)
Cc: (b) (6)

Steventon, John (FAA)

Subject: RE: COA Request

Date: Friday, February 27, 2015 1:30:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.jpg

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Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, February 26, 2015 11:08 AM

To: (b) (6), (b) (7)

Cc: (b) (6)
Subject: RE: COA Request

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Thursday, February 26, 2015 12:32 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** COA Request

Good Morning-

Per the (b) (6), (b) (7)(C) of the Merced Police Department in Merced, California, I am requesting online user access to the application for the Certification of Waiver or Authorization (COA).

The Merced Police Department is in the process of establishing a remote air unit to augment the

departments patrol and specialty divisions. The police department intends on operating a DJI Phantom 2 quad-copter for crime scene investigations/ reconstruction and monitor police operations to include SWAT and Bomb Units.

Respectfully,



From: (b) (6)
To: (b) (6), (b) (7)
Cc: Steventon John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Tuesday, February 10, 2015 10:17 00 AM
Attachments: Aircraft Registration.docx

image004.png

Aircraft Registration.docx COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx image001.gif image003.pnq

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (a) (6) (6) (ATC) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. If you are planning on assisting the Prince William County Police Department then I will also need an email from the Chief of Police acknowledging that you are authorized to represent the Prince William county Police department in all matters associated with the establishment of a UAS program and can respond to all questions and inquiries

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47 3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- 1. An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- 3. A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad hannens?)

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- · A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification
 for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and
 standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew
 Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney

(please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting
Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Tuesday, February 10, 2015 5:26 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa gov

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. (b) (6), who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

(b) (6), (b) (7)(C) ---02/02/2015 09:27:36 AM---(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

9-AJV-115-UASCOA/AWA/FAA@FAA

02/02/2015 09:20 AM

To

Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Hi I am (b) (6), (b) (7)(C)

My agency is the

Taunton Police Department

23 Summer street

Taunton Ma 02780

(b) (6), (b) (7)(C)

We will be using a Blade qx 350 with a gopro camera

We will use it mostly to photograph motor vehicle

accidents. We have a small island about 100 feet off

shore on a small lake it often has youth partying on the blind side this will save us from launching a boat to check on them.

Sent from my iPhone

On Jan 26, 2015, at 2:11 PM, 9-AJV-115-UASCOA@faa.gov wrote:

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

(b) (6), (b) (7)(C)

То

9-AJV-115-UASCOA/AWA/FAA@FAA,

01/26/2015 11:42 AM

Subject

Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/about/office.org/headquarters.offices/ato/service.units/systemops/aaim/organizations/uas/coa/

I am a (b) (6), (b) (7)(C) with the city of Taunton Ma. I would like to apply for a COA. I would like to know an account with the FAA

From: <u>Rigol, Henry (FAA)</u>
To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA)

Subject: RE: COA Request

Date: Tuesday, March 03, 2015 9:37:46 AM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, Mr. (b) (6) and Air Traffic and Law Enforcement/SAC-EC Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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 assistance) Basically, this is a .."What will you do if something bad happens?).

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Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, February 26, 2015 6:22 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Thursday, February 26, 2015 2:50 PM

To: Reyes-Garcia, Dina (FAA)

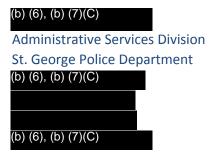
Subject: FW: COA

Dina,

I am employed by the St. George Police Department in Utah. We are a local government agency who is interested in using a UAS for critical incidents within our jurisdiction. We would like to use a small UAS less than 5 lbs (possibly a Walkera Scout x4) to stream live video to a command center during a critical incident. Its use will not be very frequent and will be used on an as needed basis. The operation would be at low levels for the most part less than 100 Ft (always less than the FAA

500 ft proposed restrictions). The only airports in the area are class E, so there will not be any problems with controlled airspace.

Thank you,



From: (b) (6), (b) (7)(C) On Behalf Of (b) (6)

Sent: Thursday, February 26, 2015 11:29 AM **To:** (b) (6), (b) (7)(C)

Subject: RE: COA

(b) (6), (b) (7)(C)

Please visit the UAS COA website (http://www.faa.gov/uas) to determine if you qualify to request COA On-line access to apply for a Public COA.

If you are a Public entity: (national, state, and local government agencies, as well as public universities)

Email <u>dina.reyes-garcia@faa.gov</u>, the COA On-line administrator:

Provide:

- a. The name of the public entity.
- b. A small description of the UAS.
- c. The concept of operation (small paragraph will suffice).

She will respond to your email in the order it was received.

If your COA activity meets "Public" COA criteria:

- a. She'll create an account for you in the COA On-Line system.
- b. She'll provide you login information.

For more information regarding Certificates of Waiver or Authorization, view the COA website or email the FAA/UAS office at <u>9-AJR-36-UAS@faa.gov</u> with any questions.



From: (b) (6), (b) (7)(C)

Sent: Thursday, February 26, 2015 12:57 PM

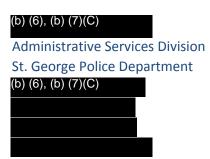
To: (b) (6

Subject: COA

Hello,

My law enforcement agency is interested in applying for a COA to allow drone use on critical incidents within our jurisdiction. We have been referred to the COA online system but do not have a username and password. What do I need to do to get access to apply for a COA?

Thank you,



Disclaimer: The information contained in this e-mail is legally privileged and/or confidential information intended only for the receipt by and use of the individual or entity to whom or which it is addressed. If you are not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this message is strictly prohibited. If you have received this message in error, please immediately notify the sender and delete this message from your computer. Thank you.

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Steventon John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Tuesday, February 10, 2015 10:24:00 AM
Attachments: Aircraft Registration.docx

Aircraft Registration.docx COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6), (b) (7)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tac ical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies hat are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and he FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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(b) (6) Senior Avia ion Analyst

Air Traffic and Law Enforcement Liaison Supporting

Federal Aviation Administra ion Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Tuesday, February 10, 2015 5:29 AM To: (b) (6), (b) (7)(C)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa gov/uas) to learn more on COAs and he COA process.

(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

То

9-AJV-115-UASCOA/AWA/FAA@FAA.

02/02/2015 03:33 PM

Subject

Message from www.faa.gov; 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/about/office org/headquarters offices/ato/service units/systemops/aaim/organizations/uas/coa/

Message:

My Name is (b) (6), (b) (7)(C) find guideline I am a (b) (6), (b) r with o(7)(C) with the Homewood Police department in Alabama. I am trying to r law enforcement use. Also I need information on how to sign up on the web site so I can file for a COA if needed.

Thanks.

(b) (6), (b) (7)(C)

From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Steventon John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Order 8900 1 Volume 16.docx

Date: Tuesday, February 10, 2015 10:40:00 AM

Attachments: Aircraft Registration.docx
COA Process Initial Itr Template.doc

image001.gif image003.png image004.png

(b) (6), (b) (7)(C)

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Federal Aviation Administra ion Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA) Sent: Tuesday, February 10, 2015 6:01 AM To: (b) (6), (b) (7)(C)

Cc: (b) (6)
Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

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(b) (6), (b) (7)(C) (b) (6), (b) (7)(C) To 9-AJV-115-UASCOA/AWA/FAA@FAA Subject Message from www.faa.gov: 9-AJR-36-UAS@faa.gov 02/05/2015 03:03 PM

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
http://www.faa.gov/about/office org/headquarters offices/ato/service units/systemops/aaim/organizations/uas/coa/

Message:

We are inquiring as to what we need for any required authorization to use a UAS (Specifically a DJI Phantom 2 Vision plus) for obtaining photos and/or video of outdoor crime scenes and/or major traffic accidents. The International association of chiefs of police recommend a COA for operation. Our intent is to fly under 100 feet (max) to obtain pictures from an aerial perspective for use in investigation and court testimony.

(b) (6), (b) (7)

From: (b) (6) (7) (C) (b) (7) (C)

Cc: <u>Steventon, John (FAA)</u>

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Tuesday, February 10, 2015 2:50:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png image005.png

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Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Tuesday, February 10, 2015 6:32 AM To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

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02/10/2015 09:01:05 AM--(b) (6), (b) (7)(C) To 9-AJV-115-UASCOA/AWA/FAA@FAA, CC Subject RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov 02/10/2015 09:01 AM

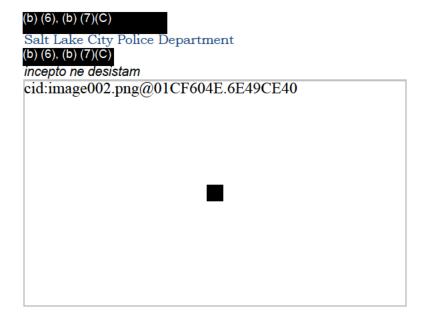
This is for the Salt Lake City Police Department.

The UAS system I am seeking is a small rotorcraft vehicle, with 4 to 8 rotors and performance similar to hobby craft. Maximum altitude would be 400 feet, maximum horizontal speed would be 45 mph.

Concept of operation would be as an extension of patrol operations. When Patrol officers are on a scene conducting a search the UAS would be deployed to provide assistance in that specific search. When documenting crime or accident scenes the UAS would be deployed to photograph and map the scene. It could be used for limited low level search and rescue in the foothill area. The camera system would employ FLIR and thermal systems as well as live video feed. All operations would be line of sight and limited in range to less than a mile.

In my discussion with several vendors the restrictions that apply to current hobby use of UAS systems are in line

with the projected use of the UAS system I am seeking to obtain for my department.



From: <u>Dina.Reyes-Garcia@faa.gov</u> [<u>mailto:Dina.Reyes-Garcia@faa.gov</u>] **On Behalf Of** <u>9-AJV-115-UASCOA@faa.gov</u>

Sent: Tuesday, February 10, 2015 6:12 AM

To: (b) (6), (b) (7)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

(b) (6), (b) (7)(C)

To9-AJV-115-UASCOA/AWA/FAA@FAA,

CC

SubjectMessage from www.faa.gov: 9-AJR-36-UAS@faa.gov

01/29/2015 11:46 AM

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

I am with the Salt Lake City Police Department and I am proposing the adoption of a UAS/UAV program for our department. Who do I speak with to find out what would be necessary to implement a program in the Salt Lake City area? At this point in time I am looking at a small rotorcraft for ease of deployment and vehicle transportation.

From: (b) (6) (7) (C) (b) (6), (b) (7)(C)

Cc: <u>Steventon, John (FAA)</u>

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Thursday, February 12, 2015 8:53:00 AM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

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The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- 1. An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- 3. A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State

Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

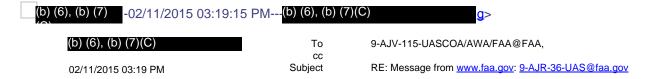
Sent: Wednesday, February 11, 2015 8:08 PM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. (b) (6) who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

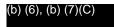


Hello,

Thanks for the reply I was wondering where the email went. The public agency is the Fontana Police Department, specifically the Inland Valley SWAT team. The description of the UAS is a DJI Phantom 2 quadcopter. The concept of the operation is to use the UAS on SWAT deployments, specifically on barricaded subjects, active shooters, and open area armed suspect swat searches. I don't see a reason for us to go over 200 ft above the ground level with our missions.

Please let me know whatever information you need from us.

(b) (6), (b) (7)(C)



From: <u>Dina.Reyes-Garcia@faa.gov</u> [Dina.Reyes-Garcia@faa.gov] on behalf of <u>9-AJV-115-</u>

<u>UASCOA@faa.gov</u> [9-AJV-115-UASCOA@faa.gov] **Sent:** Tuesday, February 10, 2015 5:14 AM

To: (b) (6), (b) (7)(C)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

(b) (6), (b) (7)(C) To 9-AJV-115-UASCOA/AWA/FAA@FAA,

01/29/2015 08:41 PM Subject Message from <u>www.faa.gov</u>: <u>9-AJR-36-UAS@faa.gov</u>

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

Hello, my name is (b) (6), (b) (7) and I am a (b) (6), (b) (7)(C) for the city of Fontana, Ca. I've been assigned by my department to research the use of small "UAS's" for use by our department SWAT team. I understand our department needs to file a COA. However, I cannot find out how to apply for an account to file the COA. Can you direct me how to obtain an account. Thanks for your time.

(b) (6), (b) (7)(C)

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA)
Subject: RE: Application for Certificate of Authorization (COA)

Date: Friday, February 27, 2015 1:13:26 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, Mr. (b) (6) an Air Traffic and Law Enforcement and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, First Responder Agency small UAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached a document that speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology

supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State

Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or me with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
Henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, February 26, 2015 8:46 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Application for Certificate of Authorization (COA)

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Wednesday, February 25, 2015 3:40 PM

To: Reyes-Garcia, Dina (FAA)

Subject: Application for Certificate of Authorization (COA)

Good Afternoon

I'm writing to apply for a COA for my Police Agency. I work for the Hollywood Police Department in Hollywood Florida. We are in the process of starting a UAV program for public safety uses. Currently the program would target Search and Rescue, Crowd Control, scene reconstruction, emergency and disaster response, evidence gathering, and tactical operations.

The program would include the use of a small UAV with the ability to carry different payloads.

Please contact me with any questions you may have or advice (which would be a great help).

(b) (6), (b) (7)(C)

Hollywood Police Department 3250 Hollywood Blvd Hollywood, FL 33021

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: Steventon, John (FAA)
RE: COA Police Department

Date: Tuesday, February 10, 2015 12:53:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. If you are planning on assisting the Prince William County Police Department then I will also need an email from the Chief of Police acknowledging that you are authorized to represent the Prince William county Police department in all matters associated with the establishment of a UAS program and can respond to all questions and inquiries.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

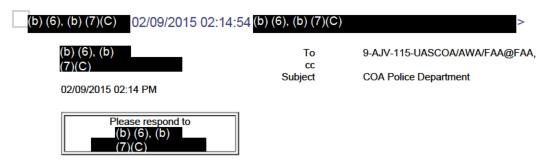
Sent: Tuesday, February 10, 2015 6:27 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: Re: COA Police Department

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



Hello.

My Name is (b) (6), (b) (7)(C) and I work for the Elmira Police Department in upstate NY. We recently purchased a DJI Phantom Vision 2 plus for use in accident reconstruction and instances where department of public works would need photos of building.

We are clueless in the COA application process and would like any information you

can give us to complete the application.

Thank you in advance for any help in this process. In the future, we hope to upgrade our drone to a more "Police" type drone and understand that a different COA is needed for that as well.

My email is (b) (6), (b) (7)(C) and my phone#(b) (6), (b) (7)(C) (b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: RE: Las Vegas PD Jurisdictional COA

Date: Thursday, February 19, 2015 4:21:57 PM

Attachments: <u>image001.gif</u>

330.png

Aircraft Registration.docx Aircraft Registration.docx COA Process Initial Itr Template.doc

(b) (6), (b) (7)(C)

The laptop has not been resolved but I am making the Web App work. So what we provide to law enforcement is......

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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 to mitigate any attendant hazard for UAS)
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Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Eliaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Thursday, February 19, 2015 1:04 PM

To: Steventon, John (FAA)

Cc: (b) (6)

Subject: Re: Las Vegas PD Jurisdictional COA

John,

Thank you for taking the call. Copy, (b) (6) is the go to guy for getting COA things started for the LEA guys here in Vegas. I'll be sure to convey the message.

(b) (6) if you feel comfortable sending me a copy of the initial "how to get started" document (John mentioned to me), I'll be sure to socialize it with interested parties. That is of course if your FAA laptop issues are resolved.

Respectfully,

(b) (6), (b) (7)(C)

On Thu, Feb 19, 2015 at 10:41 AM, < John. Steventon@faa.gov > wrote:

Frank.

It was good talking with you earlier on the LEA jurisdictional process for Las Vegas PD. Please have the proponent reach out directly to how to request and start on the path for a COA request.

Respectfully,

John D. Steventon

Aviation Safety Inspector HQ, Federal Aviation Administration Unmanned Aircraft System Integration Office, AFS-84 490 L'Enfant Plaza, Suite 3200, Washington DC, 20024

Phone: (202) 267-8143

E-Mail: john.steventon@faa.gov

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA); Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

Date: Friday, February 20, 2015 11:07:14 AM

Attachments: graycol.gif

ecblank.gif Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

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for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85.
I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

There is no cost to apply for a Certificate of Waiver/Authorization (COA). There is small cost (\$5.00) to register the UAS and the pilot training and medical certifications will also need to be funded unless members of your agency have a pilot license. And of course the cost of the unmanned aircraft system. Reference the process, please see below.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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(b) (6)

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From: Reyes-Garcia, Dina (FAA) on behalf of 9-AJV-115-UASCOA (FAA)

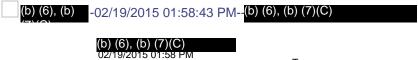
Sent: Thursday, February 19, 2015 2:55 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: Re: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. (b) (6) who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



То

9-AJV-115-UASCOA/AWA/FAA@FAA,

СС

Subject

Message from www.faa.gov: Questions relating to <abbr>COA</abbr> This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/fag/

To Whom It May Concern,
We are in the early part of the process of researching UAS for use by our agency in support of our
law enforcement mission. Can you do me a huge favor and give me an idea of what the process is to
obtain a COA and how much it will cost? The cost is the most important unanswered question at this
point, and I'm going to need a rough idea of what to expect before we move on.
Thank you for your time and your help!

(b) (6), (b) (7)(C)

Special Operations

From: (b) (6 To: (b) (6

Cc: Steventon, John (FAA); Rigol, Henry (FAA)

Subject: RE: request for COA

Date: Friday, February 20, 2015 6:05:50 PM

Attachments: graycol.gif

ecblank.gif 30791686.jpg

Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6) (b) (6)

St. James Parish Sheriff's Office

(b) (6)

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Air Traffic and Law Enforcement (b) (6)
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

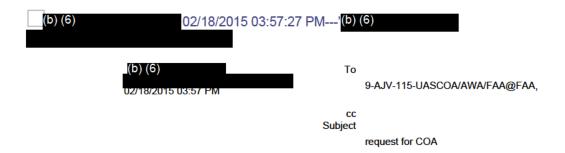
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From: Reyes-Garcia, Dina (FAA) on behalf of 9-AJV-115-UASCOA (FAA)

Sent: Thursday, February 19, 2015 2:50 PM

To: (b) (6)
Cc: (b) (6)
Subject: Re: request for COA

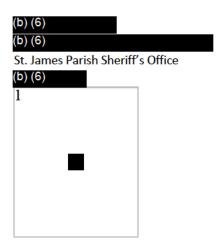
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To Whom it may concern:

My name is (b) (6) I am the (b) (6) with the St. James Parish Sheriff's Office in St. James Parish Louisiana. Our agency has begun the process of purchasing a drone air device for law enforcement & emergency response purposes. We would like to begin the process of receiving a Certificate of Waiver or authorization from the FAA in order to fly our device. Please contact me at your earliest convenience to let me know what our agency has to do in order to legally and properly fly our drone device. I can be reached by email, and my office number is listed below.

Thanks,



From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Operating an Unmanned Aircraft in the National Airspace System

Date: Wednesday, March 25, 2015 11:21:00 AM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement/(b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Operating an Unamanned Aircraft in the National Airspace System

Date: Tuesday, March 24, 2015 7:05:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6)

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From: Rigol, Henry (FAA)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA); (b) (6)

Subject: COA Access Request

Date: Friday, March 20, 2015 5:13:49 PM
Attachments: Order 8900 1 Volume 16.docx
COA Process Initial Itr Template.doc

Aircraft Registration.docx

Sir,

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Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: Rigol, Henry (FAA)

To: (b) (6)

Cc: Rigol, Henry (FAA); (b) (6) Steventon, John (FAA)

Subject: COA application process

Date: Monday, March 23, 2015 7:26:48 AM

Attachments: <u>image001.png</u>

Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

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Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520

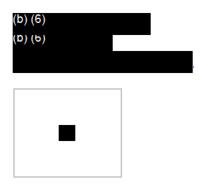
From: (b) (6)
Sent: Tuesday, March 17, 2015 8:32 PM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: Re: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

OK. When I logged onto the FAA site to start my COA application, it did not allow me to complete an initial registration into this system. How can I start my COA application?





On Mar 17, 2015, at 2:10 PM, <u>9-AFS-UAS-Inquiries@faa.gov</u> wrote:

Thank you for your inquiry. Because this type of UAS operation falls outside the scope of a model aircraft operation as defined in Public Law 112-95 Section 336, it requires FAA authorization. If the operator is a municipal police department, the public COA process would apply.

Regards,

Elizabeth Forro FAA UAS Integration Office www.faa.gov/uas

From: (b) (6)

Sent: Monday, March 16, 2015 2:36 PM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

The website is a bit confusing. Does a municipal police agency need a COA to operate a UAV under 4 lbs for crash reconstruction purposes? If they fly during day, in sight, and not within 5 miles of an airport?

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); (b) (6) Steventon, John (FAA)

Subject: COA for the Revere Police Department Date: Wednesday, May 06, 2015 5:29:13 PM

Attachments: 42°25"51.1 N 71°00"34.pdf

Aircraft Registration.docx
Order 8900 1 Volume 16.docx
COA Process Initial Itr Template.doc
Example Declaration Letter.pdf

Sir,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, Mr. (b) (6) and Air Traffic and Law Enforcement (D) -EC Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached a document that speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be
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 of action available for each phase of flight, and any outside agencies or resources for medical
 and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
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 (SOPs) for each phase of flight operation from notification for deployment through preflight,
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 any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State

Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact me or Mr. John Steventon, (b) (6) with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: (b) (6), (b) (7)(C)

Sent: Wednesday, April 01, 2015 3:29 PM

To: Reyes-Garcia, Dina (FAA)

Subject: COA for the Revere Police Department

Ma'm,

- The public entity is the Revere Police Department. We are the law enforcement entity for the City of Revere, Ma.
- The UAS will be a multirotor type, no more than 1000 mm "wheelbase" in size. Multiple vendors will be examined, a leading vendor right now, DJI produces the S1000.
- Concept of operation will include:
 - a) Test and training. 1 year period of strictly training, safety and equipment familiarity. All persons involved will attend comprehensive training.
 - b) Strictly below 400 feet and line of sight
 - c) Strict geographic training area, Rumney Marsh Reservation, 2274 acres. 400 square yards of which are being suggested. Absolutely unoccupied.
 - d) Currently a Radio Control club has a small facility approximately 1/2 mile NE of the site suggested. Very easy to coordinate and cooperate with.
 - e) Absolutely no commercial or private airplanes operating in the area/altitude. Safety is of the utmost concern.

Thank you for your consideration and we look forward to your assistance and guidance. I've attached a map and coordinates of the suggested area for your consideration. Very respectfully,

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error, please notify the system manager. This message contains confidential information and is intended only for the individual named. If you are not the named addressee, you should not disseminate, distribute or copy this email. Please notify the sender immediately by email if you have received this email by mistake and delete this email from your system. If you are not the intended recipient, you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited. This email is the property of the Revere Public School Department.

From: Rigol Henry (FAA)
(b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: COA Information

Date:Thursday, April 02, 2015 3:45:25 PMAttachments:COA Process Initial Itr Template.doc

Aircraft Registration.docx Order 8900 1 Volume 16.docx

ac91-57.pdf image001.png

Sir,

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Section AJV-115
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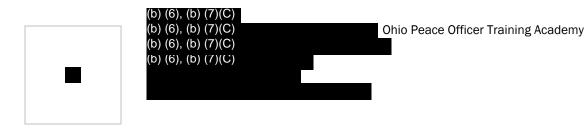
From: (b) (6), (b) (7)(C)

Sent: Thursday, April 02, 2015 2:54 PM

To: Rigol, Henry (FAA) **Subject:** COA Information

Henry:

As per our just recent conversation. I'm requesting information on COA for the Ohio Peace Officer Training Academy. Thanks.



From: Rigol, Henry (FAA)

To: (b) (6)

Cc:); Rigol, Henry (FAA); Steventon, John (FAA)

Subject: COA Online Request (b) (6) Public Entity

Date: Monday, March 23, 2015 8:51:12 AM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

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From: Reyes-Garcia, Dina (FAA) Sent: Friday, March 20, 2015 4:58 PM

To: (b) (6) Cc: (b) (6)

Subject: RE: (b) (6) Public Entity

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. Steve Pansky, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6) Sent: Monday, March 16, 2015 3:43 PM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6)

Subject: Michael P Gravel_Public Entity

Good afternoon Dina,

I received your contact information from a Mr. Derwin Lewis from the Support Desk Staff. Per his direction I wanted to request for a Public Entity (Certificate of Waiver or Authorization (COA)) in regards to Volunteer work for the local Fire Department and possible police department in Sidney NY. In talking with the Chiefs of the departments they are very excited that we may have the capability to help our residents and firefighters with this type of technology. I have a strong background in SAR as I was a AEMT / Firefighter as well so any help I can give to the community would be greatly appreciated. Please let me know if anything else is needed to help my request for an account on the On-line system. If provided I will make sure all rules and regulations are covered to the letter including Under direct visual line of sight (VLOS)= 500m. At an altitude not exceeding 150m, above the ground or water and outside of specified reserved areas (airport, environmental, security) and all pertaining to the UAS COA website.

UAS:

- I own a DJI Inspire 1 (b) (6) weighing 2935g = (6lb 7.5oz) with dimensions of 438x451x301 mm.
- The Inspire 1 has a professional flight control system including a state of the art GPS. As it flies, the position of the Inspire 1 is constantly updated and recorded using a high-strength, intelligent GLONASS + GPS system. This dual positioning system enables higher precision and quicker satellite acquisition, allowing you to see where the aircraft is on a live map and giving it a point to hover at when you release the controls. In additional to traditional GPS, GLONASS offers an even greater level of precision by providing even more satellites. The Inspire 1 even remembers its takeoff point and dynamically tracks your current position, so you can bring your Inspire 1 back to you at the press of a button. Also has Flight telemetry.
- Intelligent power management system which when in flight, your remaining battery power is shown live, letting you know how long you can continue to fly. Advanced algorithms calculate the distance of your aircraft and estimated time to return home, letting you know when it's time to fly back. What is different with this is the battery tracks the voltage of each cell, the total lifetime charges and discharges, and the overall health and battery status.

Please let me know if you need anything else in description. I have flown many different models and by far this is the best model I have ever flown with the most safety built right in.

Concept of Operation:

Summary:

 My objective would be to work this small UAS and integrate it into the existing Search and Rescue system in a safe and balanced manner to provide lifesaving support to the local Fire and Police Departments. This integration will foster a state-of-the-art way to help while adhering to a regulatory framework of safety and of environmental protection acceptable to society and all guidelines set forth by the FAA. Therefore this exercise is not simply of altering the system put in place for a more endangering existing manned aviation but creating one that is comparable, progressive and most importantly less dangerous.

How will it help:

• Drones can be deployed to difficult-to-reach areas before responders to obtain a scene size-up so appropriate resources can be deployed. I would be able to give endless uses on the emergency scene and within a nonemergency role when preplanning and training. Consider the usefulness of sending a drone up to accurately size up a hazardous material incident; managing of a local, large-scale or the ability to get an aerial view of incident operations on a large commercial building.

On a personal note I have seen the way this can help the local Fire and Police units in saving their own lives as well as the community. Please let me know if any more information is needed in my concept of operation and I will be glad to add it in response. This is my first submittal so any direction will be greatly appreciated.

Thank you,

(b) (6)

(b) (6)

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: COA Request

Date: Tuesday, March 24, 2015 12:55:58 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) an Air Traffic and Law Enforcement (b) (b) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, First Responder Agencies that are considering using small UAS for flight operations are considered "public aircraft". The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached a document that speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology

supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State

Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact me or Mr. John Steventon, (b) (6) with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, March 24, 2015 11:39 AM

To: (b) (6) Cc: (b) (6)

Subject: RE: COA Request

Importance: High

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Tuesday, March 24, 2015 11:28 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** COA Request

Thank you very much for your assistance.

(b) (6), (b) (7)(C)

Petersburg Bureau of Police

Administrative Services Division
(b) (6)

(b) (6), (b) (7) (C) From: (b) (6)
To: (b) (6), (b) (7)(C)

Subject: FW: COA Contacts

Pate: Friday, April 24, 2015 1:2

Date: Friday, April 24, 2015 1:29:00 PM
Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

From: (b) (6)
Sent: Friday, April 24, 2015 5:56 AM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA); Gardner, Scott (FAA)

Subject: RE: COA Contacts

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations

are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
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 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
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 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
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 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Gardner, Scott (FAA)

Sent: Thursday, April 23, 2015 6:12 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6) Rigol, Henry (FAA)

Subject: COA Contacts

(b) (6), (b) (7)(C)

It was great to talk to you at the Fun n Sun airshow. As you requested, our LEO contacts for COA's are (b) (6) and Henry Rigol, cc'd on this e-mail. They can provide you with initial information and help you establish your UAS program.

Please let me know if you have any further questions.

Thank you.

Scott Gardner
Air Traffic Specialist, UAS Tactical Operations Section, AFS-85/AJV-115
FAA Headquarters
800 Independence Ave, Ste 423
Washington, DC 20024

From: (b) (6)
To: (b) (6)

Cc: Steventon, John (FAA); Rigol, Henry (FAA); (b) (6)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Date: Wednesday, May 13, 2015 8:41:00 AM

Attachments: <u>Aircraft Registration.docx</u>

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

My Name is (b) (6) . I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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To operate the DJI Phantom 3 plus as a public aircraft operator the police department will need approval from the FAA. I have described the process for attaining that approval below.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John

Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6)

Sent: Tuesday, May 05, 2015 3:24 PM To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

The Thibodaux Police Department (Louisiana) is currently in the process of obtaining a DJI Phantom 3 plus. Does this system require permits or certificates. If so which?

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA); Rigol, Henry (FAA); (6)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Date: Wednesday, May 13, 2015 9:15:00 AM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the

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Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

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The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Monday, May 11, 2015 9:23 PM To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

I am (b) (6), (b) with Davis County Sheriff's Office in Farmington, UT. I am currently working on policy and procedure for a UAS program and was wondering if you could provide me any information regarding use of UAS in a law enforcement capacity. We do have Hill AFB here which is in the vicinity of several cities which we cover and I am trying to find specific information on what exactly I must do in cooperation with the Air Force Base. Any information or help you can provide will be greatly appreciated!!

Thanks,

(b) (6), (b) (7)

From: (b) (6)

To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA); Rigol, Henry (FAA)

Subject: FW: Midland County Sheriff's Office

Date: Monday, April 06, 2015 2:17:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

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From: (b) (6), (b) (7)(C)

Sent: Friday, March 27, 2015 6:26 PM To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

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Message:

I am (b) (6). (b) with the Midland County Sheriff's Office in Midland,Tx. We are looking into purchasing a Drone vehicle to be used for law enforcement purposes. We are aware of our Texas state laws regarding Drone use, we are wondering if we need to be aware of any FAA regulations pertaining to law enforcement use of drones where the FAA may be concerned. Thank you for your time.

From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Gardner, Scott (FAA)

Subject: RE: COA Contacts

Date: Friday, April 24, 2015 8:56:00 AM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

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From: Gardner, Scott (FAA)

Sent: Thursday, April 23, 2015 6:12 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6) Rigol, Henry (FAA)

Subject: COA Contacts

(b) (6), (b) (7)(C)

It was great to talk to you at the Fun n Sun airshow. As you requested, our LEO contacts for COA's are (b) (6) and Henry Rigol, cc'd on this e-mail. They can provide you with initial information and help you establish your UAS program.

Please let me know if you have any further questions.

Thank you.

Scott Gardner
Air Traffic Specialist, UAS Tactical Operations Section, AFS-85/AJV-115
FAA Headquarters
800 Independence Ave, Ste 423
Washington, DC 20024

Ph: 202-267-8192

From: (b) (6)
To: (b) (6)

Cc: Steventon, John (FAA); Rigol, Henry (FAA)
Subject: RE: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Date: Friday, April 24, 2015 3:54:00 PM

Attachments: Aircraft Registration.docx

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training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a ... "What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: 9-AFS-UAS-Inquiries (FAA) Sent: Friday, April 24, 2015 12:36 PM

To: Steventon, John (FAA); (b) (6)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This gentleman is looking for a POC to advise about law enforcement use of UAS.

Regards,

Elizabeth Forro FAA UAS Integration Office www.faa.gov/uas

From: (b) (6)

Sent: Monday, April 20, 2015 8:53 PM To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

I have been asked by my local law enforcement agency to find information on the feasibility of them integrating sUAS operations into their SOPs.

I own a small sUAS consulting agency, so they approached me and I have offered to provide any/all advice I can get to them free of charge, but would like to give a complete picture.

I understand the legal stance in Virginia, and the COA process for them to fly, but would love to opportunity to speak with a representative to get some real world data points on if LE agencies have been successful in integrating sUAS into their legacy operations.

From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA)
Subject: RE: Drone Info

Date: Monday, March 16, 2015 9:57:04 PM

Attachments: Order 8900 1 Volume 16.docx

AC 00-1 1A Public Aircraft Operations.pdf

ac91-57.pdf

Aircraft Registration.docx

N JO 7210.873 Unmanned Aircraft Operations.pdf

COA Process Initial Itr Template.doc

(b) (6)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft
Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law
enforcement (LEA) Fire, First Responder and public agencies that are interested in implementing
Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to
operate within the National Airspace System (NAS).

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, public agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

The background and experience of proponents who want to operate UAS vary greatly, so I will begin by informing you that an understanding of Title 14 of the Code of Federal Regulations (14CFR) - Aeronautics and Space, is crucial to your successful application and approval process required to operate in the NAS. UAS operations outside of active Restricted or Warning Area airspace require specific permission from the Federal Aviation Administration (FAA) in the form of a Certificate of Authorization/Waiver (COA) for public use entities or a Special Airworthiness Certification - Experimental Category (SAC-EC) for non-public use entities.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (depending on the governing organization your agency responds to). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the State Attorney General, County or City attorney and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you

will not be able to complete the COA online program until your unmanned aircraft is registered.

Please have your State Attorney General, County or City Attorney submit the document electronically (in .pdf format) to jacqueline.r.jackson@faa.gov as all mail is "screened" and the delay can be upwards of 4-6 weeks. Please copy me on the email. The letter should be addressed as follows:

Jacqueline Jackson Manager, UAS Tactical Operations (AFS-85/AJV-115) FAA Headquarters 490 L'Enfant Plaza, SW Suite 3200 Washington, DC 20024

Once the letter is received, it will be forwarded to FAA legal for review and acceptance. Once accepted, you will be sent an email with the application process for COA Online. This will be followed by another email that provides COA Online login information.

I have also attached some additional documents for your information.

- 1. Public Aircraft Operations (AC00-1.1A)
- 2. FAA Notice 7210.873 Unmanned Aircraft Operations in the National Airspace System

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General, , County or City Attorney's Office (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

So after all of this information.....

I am sorry to say you will not meet your timeline to operate as a public aircraft operator.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Monday, March 16, 2015 2:45 PM

To: (b) (6)

Subject: Drone Info

Hello, I was given your name and info from Charlotte Yo e Officer for the Tucson Police Department. I currently work as an (b) (6). (b) (7)(C) for police recruits at a police academy. I am attempting to ge

to take video of the recruits during the academy. The video would be used to make a graduation video at the end of the 17 week training and also for evaluation/critiquing of different training simulations. In short it would only be used at the academy on the recruits and not for any law enforcement or public viewing/monitoring. My Capitan is wanting the laws and rules for them prior to approving any purchase.

What laws and rules are there for the above mentioned use as far as the FAA? Would this be considered recreational use? Thank you for any help you can give in this matter.

From: (b) (6) (c) (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Utah Highway Patrol COA

Date: Thursday, May 07, 2015 8:36:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

Utah Highway Patrol

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State

Attorney General's Office (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Eliaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: (b) (6), (b) (7)(C)

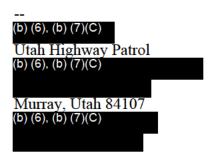
Sent: Thursday, May 07, 2015 12:20 PM

To: (b) (6)

Subject: Utah Highway Patrol COA

I represent the Utah Highway Patrol, under the Utah Department of Public Safety and would like to apply for a COA to utilize unmanned aircraft systems in law enforcement.

Please contact me at the email address above or the cell phone number listed below. Thank you very much for your assistance with this matter.



From: Rigol, Henry (FAA)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Wayne County, KY Sheriff"s Dept. COA on Line Request

Date: Wednesday, April 15, 2015 3:10:39 PM

Order 8900 1 Volume 16.docx
COA Process Initial Itr Template.doc

<u>Aircraft Registration.docx</u> <u>Example Declaration Letter.pdf</u>

Sir.

Attachments:

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) an Air Traffic and Law Enforcement (b) -EC Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, First Responder Agencies that are considering using small UAS for flight operations are considered "public aircraft". The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
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 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant

hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)

 An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact me or Mr. John Steventon, (b) (6) with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Operating an unmanned aircraft in the National Airspace System

Date: Wednesday, June 03, 2015 1:45:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

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Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: (b) (6)

Sent: Wednesday, June 03, 2015 10:43 AM

To: (b) (6)

Subject: My email

(b) (6)
(D) (D) (E)

Beaver County Sheriff's Office 2270 South 525 West PO Box 391

Beaver, Utah 84713-0391
(b) (6)

Click here to sign up for Beaver County Citizen Alerts

From: (b) (6)
To: (b) (6)

 Cc:
 Rigol, Henry (FAA); Steventon, John (FAA)

 Subject:
 Operating a UAS in the National airspace System

Date: Thursday, June 11, 2015 2:59:00 PM

Attachments: Aircraft Registration.docx
Order 8900 1 Volume 16.docx

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(b) (6)

Senior Aviation Analyst
Law Enforcement, Fire and First Responders
Special Airworthiness Certificate-Experimental Category Supporting
Federal Aviation Administration Air Traffic Organization
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

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From: Rigol, Henry (FAA)

To: (b) (6)

Cc: (6) (6)); Steventon, John (FAA); Rigol, Henry (FAA); Reyes-Garcia, Dina (FAA)

Subject: FAA COA Request - Mason County Sheriff"s Office, MI.

Date: Wednesday, June 03, 2015 2:33:11 PM

Attachments: <u>image001.png</u>

COA Process Initial Itr Template.doc

Aircraft Registration.docx
Order 8900 1 Volume 16.docx
Example Declaration Letter.pdf

Importance: High

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Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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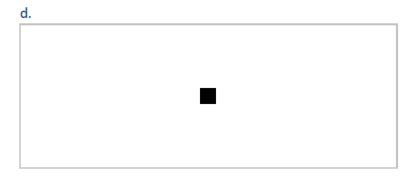
From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, June 03, 2015 7:00 AM

To: (b) (6) Cc: (b) (6)

Subject: RE: UAS COA Importance: High

Thank you for contacting the FAA. Your case has been assigned to (b) (6) , our Law Enforcement liaison, who will continue to assist you with the COA process and your questions. Please note that emails are responded to in the order they are received. You may visit our website (www.faa.gov/uas) to learn more about UAS and the COA process.



From: (b) (6)

Sent: Wednesday, June 03, 2015 9:53 AM

To: Reyes-Garcia, Dina (FAA)

Subject: UAS COA

Ms. Reyes-Garcia,

We at the Mason County Sheriff's Office in Ludington Michigan are requesting to establish a COA within our County. We have obtained a DJI Phantom 2 Vision + as our aircraft (UAS). We intend to use our UAS to document traffic crash scenes, document crime scenes, assist with search and rescue of lost people, and assist our Tactical Team during deployment. I have requested the appropriate FAA form to get our UAS registered with the FAA. Does our UAS have to be registered before the COA process can move forward? Thank you for your assistance.

(b) (6)

Mason County Sheriff's Office 302 N. Delia St. Ludington, MI. 49431 (b) (6) From: Rigol, Henry (FAA) To:

Cc: Rigol, Henry (FAA) Subject: FAA COA Request: Boynton Beach Police Department

Date: Thursday, June 04, 2015 2:46:46 PM Attachments: Order 8900 1 Volume 16.docx

Aircraft Registration.docx

COA Process Initial Itr Template.doc

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Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: 9-AFS-UAS-Inquiries (FAA)

Sent: Thursday, June 04, 2015 8:21 AM

To: (b) (6) Steventon, John (FAA)

Subject: FW: UAS inquiry

Regards,

Elizabeth Forro FAA UAS Integration Office www.faa.gov/uas

From: (b) (6)

Sent: Wednesday, May 13, 2015 4:19 PM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: UAS inquiry

Hello,

My local municipality is beginning the process of starting a UAS program. Prior to starting our COA process, I need to outline a safety policy and procedure.

Does the FAA have a system in place for law enforcement UAS operators to contact ATC to advise them of UAS operations in a certain area? (ie, call 555-2222, "I will be operating a UAS at 80-120ft at x location for the next two

hours.")

Is there a system that would allow certified law enforcement officers to monitor real time air traffic in the area so we can safely avoid any proximity issues?

Thank you,



Boynton Beach Police Department (b) (6)

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA); Reyes-Garcia, Dina (FAA); Rigol, Henry (FAA)

Subject: FAA COA Request: New Garden Township Police Dept. PA

Date: Monday, June 01, 2015 2:17:01 PM

Aircraft Registration.docx
Order 8900 1 Volume 16.docx
COA Process Initial Itr Template.doc
Example Declaration Letter.pdf

image001.pnq image002.jpq image003.pnq image004.jpq

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the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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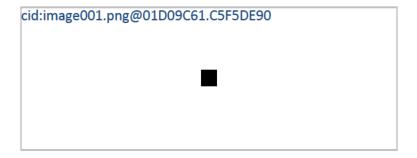
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From: Reyes-Garcia, Dina (FAA)
Sent: Monday, June 01, 2015 8:55 AM
Tag (b) (b) (7)(C)

To: (b) (6), (b) (7)(C)
Cc: (b) (6)

Subject: RE: Certificate of Waiver Authorization - UAS

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Monday, June 01, 2015 11:08 AM

To: Reyes-Garcia, Dina (FAA)

Subject: Certificate of Waiver Authorization - UAS

Ms. Reyes-Garcia:

Good morning, my name is (b) (6). (b) (7)(C) and I am the (b) (6). (b) (7) New Garden Township Police Department, Chester County, PA. I am emailing to request login information for the FAA website to apply for a certificate of waiver authorization for the use of a UAS. My police organization recently purchased the UAS from DJI (Phantom II) to use for several reasons listed below, which are outlined in our General Order:

- A. The New Garden Township Police Department shall use an unmanned aircraft once the following procedures have been accomplished:
 - 1. Crime and/or Traffic Collision Scene Analysis
 - 2. Disaster Scene Assessment
 - 3. Missing or Lost Person Search
 - 4. Suspect Search
 - 5. Major or Mass Vehicular/Crowd Monitoring
 - 6. Covert Criminal Investigation
 - a. See Section IV, Subsection 8

The public entity is New Garden Township, Chester County, Pennsylvania

The UAS is a DJI Phantom II

If there is anything else I need, please reply to my email or call me at the number below. Thank you in advance for your assistance in this matter.





Our Values: "Human Life, Integrity, Professionalism and Justice"

"The only thing worse than being blind is having sight but no vision." Helen Keller

From: Rigol, Henry (FAA)

To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FAA COA request - Minnesota Bureau of Criminal Apprehension ,MN

Date: Tuesday, June 16, 2015 9:16:32 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx

Sir,

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----Original Message-----

From: 9-AFS-UAS-Inquiries (FAA) Sent: Monday, June 15, 2015 1:15 PM

To: (b) (6) Steventon, John (FAA)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Regards,

Elizabeth Forro FAA UAS Integration Office www.faa.gov/uas

From: (b) (6)

Sent: Tuesday, June 02, 2015 3:57 PM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

Our agency, Minnesota Bureau of Crminal Apprehension is currently researching policies/regulations/rules for a Law Enforcement agency buying and using a UAS. Trying to find out where to start?

From: Rigol, Henry (FAA)

To: (b) (6)

Cc: Steventon, John (FAA); Rigol, Henry (FAA)

Subject: FAA COA request: Minnesota Bureau of Criminal Apprehension

Date: Thursday, June 04, 2015 8:43:54 AM Attachments: Order 8900 1 Volume 16.docx

COA Process Initial Itr Template.doc Example Declaration Letter.pdf Aircraft Registration.docx

image001.png image002.png

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Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: (b) (6)

Sent: Wednesday, June 03, 2015 4:36 PM

To: (b) (6)

Cc: Rigol, Henry (FAA)

Subject: RE: UAV for Law Enforcement

(b) (6)

I am the correct person to speak with for Law Enforcement, Fire and First responder agencies interested in operating unmanned aircraft in the National Airspace System (NAS). However, Since January, Mr. Henry Rigol with the FAA has joined the team and we have split up the country to respond to interested parties and to assist them in the development of a UAS program. I have copied Mr. Rigol on this email who will respond to you shortly.

Respectfully,

(b) (6) (b) (6)

Law Enforcement, Fire and First Responders

Special Airworthiness Certificate-Experimental Category Supporting

Federal Aviation Administration Air Traffic Organization

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6) (b) (6)

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From: (b) (6)

Sent: Wednesday, June 03, 2015 1:31 PM

To: (b) (6)

Subject: UAV for Law Enforcement

Hi Steve,

I was given your name as a contact for Law Enforcement agencies. If that is not correct could you point me to who I should communicate with. My agency is the Minnesota Bureau of Criminal Apprehension, we are a State Law Enforcement agency and I was tasked to figure out the steps/process necessary to operate a UAV for specifically crime scene aerial documentation, Missing Persons and Marijuana grows on public lands. Some of my questions are: What is the first step? Do we have to fill out a training COA? Is there an application form? Do we buy UAV first? I did go on website and never did see any forms or applications.

Thank you,

(b) (6)

(b) (6)

Bureau of Criminal Apprehension

1430 Maryland Ave. E., St. Paul MN, 55106

(b) (6)
(b) (6)

[Display | Follow BCA | Fol

From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Operating a small Unmanned Aircraft in the National Airspace System

Date: Tuesday, May 26, 2015 3:36:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6) as an introduction, I am a contractor with (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
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 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
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Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

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 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
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 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
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(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement/SAC-EC Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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(b) (6)

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Law Enforcement, Fire and First Responders
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From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: UAS COA

Date: Wednesday, June 17, 2015 8:53:00 PM

Attachments: <u>image001.png</u>

Aircraft Registration.docx Order 8900 1 Volume 16.docx

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If you wish to operate your personal UAS as a Commercial Operator to support the Sheriff's Office or support your personal business then I recommend you apply for a 333 Exemption. The information on the 333 exemption can be found on the FAA website www.faa.gov/uas and under top task section on the right side of the site select Apply for a Section 333 exemption.

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Air Traffic and Law Enforcement (b) (6) Liaison Supporting
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(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, June 17, 2015 2:30 PM

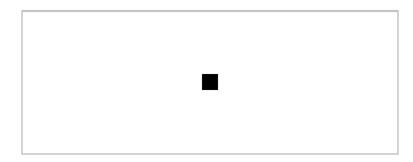
To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: UAS COA Importance: High

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

Please note that for personal use you will need to apply for an exemption and a commercial COA. (b) (6) will point you in the right direction.



From: (b) (6), (b) (7)(C)

Sent: Wednesday, June 17, 2015 3:23 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** FW: UAS COA

Greeting Dina,

I am (b) (6). (b) (7)(C) with Deschutes County Sheriff's Office Search and Rescue. I just recently purchased a 3DR Solo Drone and wanted to use it for some of our search operations, (ie; scouting for hazards, looking into difficult areas to access, documenting trainings and portions of searches.) Maximum above ground altitude for this would be about 500ft. Since it is personally owned I would also like to use is for personal business if I chose to contract out to non public entities such as realtors or surveyors, Max above ground altitude for this endeavor would be about 300ft.

Your assistance with obtaining a COA for either or both of these endeavors would be greatly appreciated.

Drone Specs:

Flight time: up to 25 min without payload, or up to 20 min with GoPro and Solo Gimbal

Controller battery life of up to 4 hours; built-in rechargeable battery (8 hours with optional extended

battery)

Weight: 1500 g; 1800 g with Solo Gimbal and GoPro

Autopilot: Pixhawk 2 Video latency: 180 ms

Wifi range: up to half a mile, depending on environment)

From: (b) (6) On Behalf Of oeaaa_helpdesk

Sent: Tuesday, June 16, 2015 11:18 AM

To: (b) (6), (b) (7)(C)
Subject: RE: UAS COA

(b) (6), (b) (7)(C)

Please visit the UAS COA website (http://www.faa.gov/uas) to determine if you qualify to request COA On-line access to apply for a Public COA.

If you are a Public entity: (national, state, and local government agencies, as well as

public universities)

Email dina.reves-garcia@faa.gov, the COA On-line administrator:

Provide:

- a. The name of the public entity.
- b. A small description of the UAS.
- c. The concept of operation (small paragraph will suffice).

She will respond to your email in the order it was received.

If your COA activity meets "Public" COA criteria:

- She'll create an account for you in the COA On-Line system.
- b. She'll provide you login information.

For more information regarding Certificates of Waiver or Authorization, view the COA website or email the FAA/UAS office at <u>9-AJR-36-UAS@faa.gov</u> with any questions.

(b) (6)
Support Desk Staff
(b) (6)
oeaaa_helpdesk@cghtech.com

From: (b) (6), (b) (7)(C)

Sent: Thursday, June 04, 2015 3:44 PM

To: oeaaa_helpdesk Subject: UAS COA

How do I create an account to apply for a UAS COA?

(b) (6), (b) (7)(C)

Deschutes County Sheriff's Office
(b) (6), (b) (7)(C)
(b) (6), (b) (7)(C)

From: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: UAS COA

Date: Wednesday, June 17, 2015 8:53:00 PM

Attachments: <u>image001.pnq</u>

Aircraft Registration.docx Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

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 the site in the event of an emergency (this could include execution of procedures outlined in the
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 for each phase of flight, and any outside agencies or resources for medical and fire or other
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- A review of the agency's UAS training and proficiency program, to include all training records
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 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
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 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ

to mitigate any attendant hazard for UAS)

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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Eliaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, June 17, 2015 2:30 PM

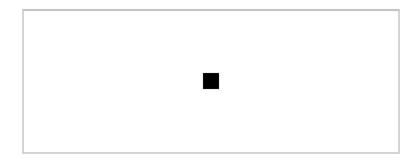
To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: UAS COA Importance: High

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

Please note that for personal use you will need to apply for an exemption and a commercial COA. (b) (6) will point you in the right direction.



From: (b) (6), (b) (7)(C)

Sent: Wednesday, June 17, 2015 3:23 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** FW: UAS COA

Greeting Dina,

I am (b) (6). (b) (7)(C) with Deschutes County Sheriff's Office Search and Rescue. I just recently purchased a 3DR Solo Drone and wanted to use it for some of our search operations, (ie; scouting for hazards, looking into difficult areas to access, documenting trainings and portions of searches.) Maximum above ground altitude for this would be about 500ft. Since it is personally owned I would also like to use is for personal business if I chose to contract out to non public entities such as realtors or surveyors, Max above ground altitude for this endeavor would be about 300ft.

Your assistance with obtaining a COA for either or both of these endeavors would be greatly appreciated.

Drone Specs:

Flight time: up to 25 min without payload, or up to 20 min with GoPro and Solo Gimbal

Controller battery life of up to 4 hours; built-in rechargeable battery (8 hours with optional extended

battery)

Weight: 1500 g; 1800 g with Solo Gimbal and GoPro

Autopilot: Pixhawk 2 Video latency: 180 ms

Wifi range: up to half a mile, depending on environment)

From: (b) (6) On Behalf Of oeaaa_helpdesk

Sent: Tuesday, June 16, 2015 11:18 AM

To: (b) (6), (b) (7)(C)
Subject: RE: UAS COA

(b) (6), (b) (7)(C)

Please visit the UAS COA website (http://www.faa.gov/uas) to determine if you qualify to request COA On-line access to apply for a Public COA.

If you are a Public entity: (national, state, and local government agencies, as well as

public universities)

Email dina.reves-garcia@faa.gov, the COA On-line administrator:

Provide:

- The name of the public entity.
- b. A small description of the UAS.
- c. The concept of operation (small paragraph will suffice).

She will respond to your email in the order it was received.

If your COA activity meets "Public" COA criteria:

- She'll create an account for you in the COA On-Line system.
- She'll provide you login information.

For more information regarding Certificates of Waiver or Authorization, view the COA website or email the FAA/UAS office at <u>9-AJR-36-UAS@faa.gov</u> with any questions.

(b) (6)
Support Desk Staff
(b) (6)
oeaaa helpdesk@cghtech.com

From: (b) (6), (b) (7)(C)

Sent: Thursday, June 04, 2015 3:44 PM

To: oeaaa_helpdesk Subject: UAS COA

How do I create an account to apply for a UAS COA?

(b) (6), (b) (7)(C)

Deschutes County Sheriff's Office
(b) (6), (b) (7)(C)

From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: UAS COA

Date: Wednesday, June 17, 2015 8:53:00 PM

Attachments: image001.png

Aircraft Registration.docx Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, First Responder Agency small UAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document. I must also explain that the UAS must be either owned (Title 49 USC 40102A(41)(C)) or leased for a period of no less than 90 days for the public agency to qualify (Title 49 USC 40102A(41)(d)).

If you wish to operate your personal UAS as a Commercial Operator to support the Sheriff's Office or support your personal business then I recommend you apply for a 333 Exemption. The information on the 333 exemption can be found on the FAA website www.faa.gov/uas and under top task section on the right side of the site select Apply for a Section 333 exemption.

For UAS operations as a public aircraft Operator the following information is provided.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the

requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
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Respectfully,

Senior Aviation Analyst Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, June 17, 2015 2:30 PM

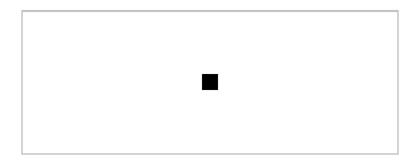
 T_0 : (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: UAS COA Importance: High

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Please note that for personal use you will need to apply for an exemption and a commercial COA. will point you in the right direction.



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Sent: Wednesday, June 17, 2015 3:23 PM

To: Reyes-Garcia, Dina (FAA) Subject: FW: UAS COA

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Your assistance with obtaining a COA for either or both of these endeavors would be greatly appreciated.

Drone Specs:

Flight time: up to 25 min without payload, or up to 20 min with GoPro and Solo Gimbal

Controller battery life of up to 4 hours; built-in rechargeable battery (8 hours with optional extended

battery)

Weight: 1500 g; 1800 g with Solo Gimbal and GoPro

Autopilot: Pixhawk 2 Video latency: 180 ms

Wifi range: up to half a mile, depending on environment)

From: (b) (6) On Behalf Of oeaaa_helpdesk

Sent: Tuesday, June 16, 2015 11:18 AM

To: (b) (6), (b) (7)(C)

Subject: RE: UAS COA

(b) (6), (b) (7)

Please visit the UAS COA website (http://www.faa.gov/uas) to determine if you qualify to request COA On-line access to apply for a Public COA.

If you are a Public entity: (national, state, and local government agencies, as well as public universities)

Email dina.reves-garcia@faa.gov, the COA On-line administrator:

Provide:

- The name of the public entity.
- b. A small description of the UAS.
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(b) (6)
Support Desk Staff
(b) (6)
oeaaa helpdesk@cghtech.com

From: (b) (6), (b) (7)(C)

Sent: Thursday, June 04, 2015 3:44 PM

To: oeaaa_helpdesk Subject: UAS COA

How do I create an account to apply for a UAS COA?

(b) (6), (b) (7)(C)

Deschutes County Sheriff's Office
(b) (6), (b) (7)(C)

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: COA Application

Date: Friday, June 12, 2015 2:25:00 PM

Attachments: Aircraft Registration.docx
Order 8900 1 Volume 16.docx

image001.png

(b) (6), (b) (7)(C)

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 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

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 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State

Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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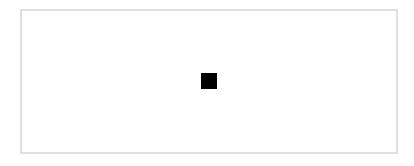
From: Reyes-Garcia, Dina (FAA) Sent: Friday, June 12, 2015 11:22 AM

Sent: Friday, June 7 To: (b) (6), (b) (7)(C) Cc: (b) (6)

Subject: RE: COA Application

Importance: High

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6)

Sent: Friday, June 12, 2015 1:35 PM To: Reyes-Garcia, Dina (FAA)
Subject: REF: COA Application

I am the (b) (6), (b) (7)(C) for the Terrebonne Parish Sheriff's Office, Houma, La. We are seeking to purchase a DJI Inspire 1 and a DJI Phantom 3, I have attached the specs and a picture for each, should you wish to view them.

The UAS's that our agency wishes to purchase are lightweight, both less that fifteen pounds, with the ability to video and take pictures. One will be utilized with a flir camera for nighttime use and the other will be equipped with a video recorder/color camera.

It is our goal to have the UAS's to assist in search and rescue as our Water Patrol Division is responsible to help lost/stranded/sunken boaters. Our Uniformed Patrol Deputies search for Alzheimer's Patients that have wondered away, lost children, bad accidents where people have been thrown from their vehicles into bushy wooded areas or marshy areas and even possibly thrown into the water. We also protect an extremely flood prone community with numerous levees. Working collaboratively with the Terrebonne Levee and Conservation District to assess Levees pre- and post-Hurricanes, torrential rain storms or in the emergency of a levee breach, the option of a UAS would benefit our community. Additionally we have recently acquired a Memorandum of Understanding with our local Levee District to assist them in the ability to video their levee system ore- and post-hurricane. This will give a visual on the effect of the levees and lands that the levees protect.

Sincerest Thanks,

(b) (6), (b) (7)(C) (b) (6), (b) (7)(C) From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Ciccone, Leslie Ann (FAA); Steventon, John (FAA); Ready, Kenneth (FAA)

Subject: RE: COA online application

Date: Monday, May 18, 2015 2:55:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc

(b) (6), (b) (7)(C)

As a follow-up to our conversation here is the remaining information for a public aircraft operator.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the

event of a lost-link occurrence (loss of command and control (C2) link).

- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

So reference the 333 Exemption Program. Mr. Kenneth Ready is a good point of contact for the program however I would recommend you review the FAA website www faa.gov/UAS and click on the 333 Exemption Icon that will take you to the program. It will provide valuable information on how to apply for the program. Reference those criteria I spoke of, if you were to operate below 200 Feet AGL with the following criteria......

- (1) Beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or seaport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
- a) 5 nautical miles (NM) from an airport having an operational control tower; or
- b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
- c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
- d) 2 NM from a heliport, seaport or gliderport

The 333 exemption program has a means of expediting the Air traffic review process. Mr. Ready should be able to give you a better understanding of the application process and the timeline for the approval of such a submission.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6)

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

----Original Message----

From: (b) (6), (b) (7)(C)

Sent: Monday, May 18, 2015 10:56 AM

To: (b) (6)

Cc: Rigol, Henry (FAA); Ciccone, Leslie Ann (FAA); Steventon, John (FAA)

Subject: Re: COA online application

Steve

Thanks for the information and I look forward to talking with you so we can receive a timely COA. It is a project that is not classified but is pressing some state of the art sensor technology's with both military and public safety value.

(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

Sent from my iPad

> On May 18, 2015, at 10:50 AM, <Steven.CTR.Pansky@faa.gov> <Steven.CTR.Pansky@faa.gov> wrote:

(b) (6), (b) (7)(C)

\

> As an introduction, I am a contractor with Science Applications International Corporation (SAIC) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests. I have also included Leslie Ciccone on this email since Leslie processes those certificate of Waivers (COAs) that deal with the military.

>

> As you are probably aware the Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically the Department of Defense, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

>

> I am currently on a conference call but will give you a call a bit later so we can talk about your proposed UAS

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operations.
>
> Respectfully,
  (b) (6)
> Senior Aviation Analyst
> Air Traffic and Law Enforcement/SAC-EC Liaison Supporting Federal
> Aviation Administration Unmanned Aircraft Systems Tactical Operations
> Section, AFS-85/AJV-115
> (b) (6)
>(b) (6)
> WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled
under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know",
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Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other
action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.
> -----Original Message-----
> From: Jackson, Jacqueline R (FAA)
> Sent: Monday, May 18, 2015 9:19 AM
> To: (b) (6), (b) (7)(C)
> Cc: (b) (6)
                          (FAA); Rigol, Henry (FAA)
> Subject: RE: COA online application
(b) (6), (b) (7)(C)
               and Hank Rigol will be assisting you with your COA application. One of them will contact you
within the next 24-48 hours.
> Steve can be reached at 202-904-9400 and Hank can be reached at 202-267-4013.
  (b) (6)
                   is Jim Williams Admin Assistant and can be reached at (b) (6)
> Thank you!
> Jackie
> Jacqueline R. Jackson
> Manager, Tactical Operations Section
> Unmanned Aircraft Systems Integration Office
> WK:202-267-8177
> (b) (6)
> Email:Jacqueline.r.jackson@faa.gov
>
>
   ----Original Message-----
> From: (b) (6), (b) (7)(C)
> Sent: Friday, May 08, 2015 10:06 AM
> To: Jackson, Jacqueline R (FAA)
> Subject: COA online application
>
> Jacqueline
> Good morning.
> I tried to submit an online application for a COA. Apparently I need help to obtain instructions on a user name and
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password. For several years I have donated time as a FAA Safety counselor (FAAST Team) and have FAA access

with a user name and password but that did not work on your site.

- > I am heading up a high altitude drone project with Special Forces, as well as local sheriffs and Forest Service application. Your prompt assistance on this would be greatly appreciated.
- > You may respond to this email or if needed contact me on my direct line--(b) (6)
- > I will be in DC on 8 & 9 June and if time allows stop by to brief Jim Williams on this Military and public safety related project. (b) (6), (b) (7)

(b) (b) (c) (7) (b) (6), (b) (7)(C)

> Sent via IPhone -please excuse any typos < Order 8900 1 Volume 16.docx>

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Elgin Police

Date: Tuesday, May 26, 2015 1:29:00 PM

Attachments: <u>Aircraft Registration.docx</u>

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

Please find attached the 8900.1 that will speak to operating a UAS as a public agency. I have also provided you with the introduction letter I pass along to all agencies interested in operating a UAS in the national Airspace System.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground

and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
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Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, May 26, 2015 10:21 AM

To: (b) (6)

Subject: Elgin Police

Good afternoon (b) (6), thank you for talking with me. If you could please send me the section number we talked about over the phone that would help us a lot.

Thanks Again.

(b) (6), (b) (7)(C) Elgin Police Dept. Crime Free Housing Unit (b) (6), (b) (7)(C)

This message, including any attachments, is the property of the City of Elgin. It may be legally privileged and/or confidential and is intended only for the use of the intended recipient(s). No recipient should forward, print, copy, or otherwise reproduce this message in any manner that would allow it to be viewed by any individual not originally listed as a recipient. If the reader of this message is not the intended recipient, you are hereby notified that any unauthorized disclosure, dissemination, distribution, copying or the taking of any action in reliance on the information herein is strictly prohibited. If you have received this communication in error, please immediately notify the sender and delete this message.

Due to the nature of the Internet, the sender is unable to ensure the integrity of this message and does not accept any liability or respons bility for any errors or omissions (whether as the result of this message having been intercepted or otherwise) in the contents of this message.

Any views expressed in this communication are those of the individual sender, except where the sender specifically states them to be the views of the city.

Subject: RE: FAA login / password

Date: Tuesday, June 02, 2015 9:41:00 AM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6)

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA) Sent: Tuesday, June 02, 2015 5:41 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: FAA login / password

Importance: High

Thank you for contacting the FAA. Your case has been assigned to (b) (6) Law Enforcment liaison, who will continue to assist you with the COA process.

From: (b) (6), (b) (7)(C)

Sent: Monday, June 01, 2015 5:29 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** FAA login / password

Hi this is (b) (6), (b) (7)(C) from The Exeter Police Department replying to the email sent to me. I have been tasked with the UAS Program within my department. Her is the list of info that is

requested.

- a. Exeter Police Department (Exeter California)
- b. Inspire 1 from DJI industries with a 4k camera, 4 rotor drone
- c. Drone use will be used to enhance the department's mission of protecting lives and property when other means and resources are not available or are less effective. Any use of the UAS will be in strict accordance with constitutional and privacy rights and FAA regulations. Only authorized operator who have completed the required training shall be permitted to operate the UAS. UAS Operations should only be conducted during daylight hours and a UAS should not be flow over populated area without FAA approval. The UAS will not be used to conduct random surveillance activities. It will not be used to harass, intimidate or discriminate against any individual or group.

If there is any further information I need please let me know and I will be happy to provide you with it... Thank you

(b) (6), (b) (7) Exeter Police Department 100 N. "C" Street Exeter, CA 93221 ((b) (6), (b) (7) (C)

CONFIDENTIALITY NOTICE:

This e-mail transmission and any documents, files or previous e-mail messages attached to it may contain confidential information that is legally privileged. Do not read this e-mail if you are not the intended recipient. If you are not the intended recipient, or a person responsible for delivering it to the intended recipient, you are hereby notified that any disclosure, copying, distribution or use of any of the information contained in or attached to this transmission is strictly prohibited. If you have received this transmission in error, please immediately notify us by reply e-mail or by telephone at (559) 592.3103. and destroy the original transmission and its attachments without reading or saving it in any manner. Thank you.

From: Rigol, Henry (FAA)

To: (b) (6)

Cc: (b) (6)

<u>Rigol, Henry (FAA)</u>

Subject:RE: Garrard County Sherriff COADate:Monday, June 08, 2015 2:44:59 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx COA Process Initial Itr Template.doc

image001.png image002.jpg image003.jpg

Sir,

You mention that your company would like to lease the sUAS to the Garrard County Sherriff. The FAA would require the Garrard County Sherriff Office to be the COA proponent and the Sherriff's Office would be required to be in continues <u>90 day lease contact</u>. During the lease period, your system could only be used by the Sherriff's Office and only for Public Operations.

Steventon, John (FAA);

If your company were to operate under the FAA 333 Exemption, you would be able to contract your commercial services to the Sherriff's Office. See the link provided for further information on the 333 Exemption process

https://www.faa.gov/uas/legislative_programs/section_333/

Public COA Process

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (c) and Air Traffic and Law Enforcement (b) (d) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training

requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached a document that speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

An Airworthiness Release (AWR) statement from the Proponent's accountable
executive acknowledging that the Proponent accepts all responsibility for ensuring
that the UAS is airworthy and that the it will be operated and maintained in strict
compliance with the manufacturer's operational and maintenance
recommendations.

- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a ... "What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

(www.faa.gov/uas) that describes the COA process and an example of the application. The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact me or Mr. John Steventon, (b) (6) with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: (b) (6) Sent: Monday, June 08, 2015 2:06 PM

To: Rigol, Henry (FAA)

Cc: (b) (6)

Subject: Garrard County Sherriff COA

Henry,

Good to talk to you. I am including the Garrard County Sheriff on this email, (b) (6), (b) (7)(C) We look forward to your response and getting the COA to the Sheriff's department.

Best,

(b) (6) (b) (6) Sustainment Solutions Inc. (SSI)

Sustainment Solutions Inc. (SSI)

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www.ssi-worldwide.com



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From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: (b) (6) ; Steventon, John (FAA); Rigol, Henry (FAA)

Subject: FAA COA request - NYPD AVIATION UNIT

Date: Thursday, June 18, 2015 5:28:12 PM

Attachments: Order 8900 1 Volume 16.docx

Aircraft Registration.docx

(b) (6), (b) (7)(C)

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) -EC Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

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Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: (b) (6)

Sent: Wednesday, June 17, 2015 7:57 PM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)

Subject: RE: COA Site Access - NYPD AVIATION UNIT

(b) (6), (b) (7)(C)

I have copied Mr. Henry "Hank" Rigol from our office on this email who handles Law Enforcement, Fire and First responder UAS COA inquiries for the Eastern Part of the County. He will be responding to you on your inquiry.

Respectfully,

(b) (6)

Senior Aviation Analyst

Law Enforcement, Fire and First Responders

Special Airworthiness Certificate-Experimental Category Supporting

Federal Aviation Administration Air Traffic Organization

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Wednesday, June 17, 2015 12:18 PM

To:

Subject: COA Site Access - NYPD AVIATION UNIT

(b) (6)

My name is(b) (6), (b) (7)(C) , I am the (b) (6), (b) (7)(C) for the NYPD Aviation Unit. I am contacting you on behalf of our Commanding Officer, Deputy Inspector James Coan, in regards to the NYPD Aviation Unit's intent to request access to the FAA COA application site. We are currently in the research and procurement stage to obtain a limited number of UAS airframes for evaluation and testing. We will then choose which models will best fit our mission profile and move forward with a COA for those models. If you can provide any information or documentation that can expedite this process, please e-mail me or reach me at the numbers listed below.

Thank you in advance (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

Aviation Unit, Special Projects Floyd Bennett Field

From: Rigol, Henry (FAA)

To: (b) (6)

Cc: Rigol, Henry (FAA); (b) (6) Steventon, John (FAA)

Subject: FAA COA request for Norwalk Police Dept, CT Date: Thursday, July 09, 2015 3:37:11 PM

Attachments: <u>image001.png</u>

Aircraft Registration.docx Order 8900 1 Volume 16.docx

Importance: High

Good Afternoon,

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Air Traffic Specialist, UAS Tactical Operations
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henry.rigol@faa.gov

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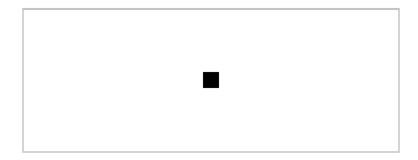
From: Reyes-Garcia, Dina (FAA) Sent: Thursday, July 09, 2015 7:08 AM

To: (b) (6) Cc: (b) (6)

Subject: RE: Request for COA on-line access

Importance: High

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6)

Sent: Wednesday, July 08, 2015 4:53 PM

To: Reyes-Garcia, Dina (FAA)

Subject: Request for COA on-line access

Administrator Dina Reyes-Garcia,

My name is (b) (6)

I am employed by the Norwalk Police Department in Connecticut. I have been assigned to apply for a public COA and am requesting access to the on-line system. The Norwalk Police Department is a local police department consisting of 175 sworn officers serving the City of Norwalk which has an approximate population of 86,000 citizens.

The UAS we will be using for police use is the Inspire One Model T600 manufactured by DJI. This UAS is a Lithium Polymer powered quad copter. The UAS weighs 2935 grams and is $438 \times 4451 \times 301$ mm in dimensions. The UAS remote controller operates on a $5.725^{\circ}5.825$ GHz and $2.400^{\circ}2.483$ GHz frequency.

The UAS will be piloted by a team consisting of a operator and a spotter. The UAS will be utilized for different police operations such as crime scene documenting, assist with SWAT team operations, and searching for missing people. The UAS will be operated within line of sight, no more than 400' high and 800' away.

If you have any questions or concerns please feel free to contact me. Thank you very much for your assistance.

Nate

(b) (6)

Norwalk Police Department
One Monroe St

Norwalk, CT 06854
(b) (6)

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: (b) (6); Rigol, Henry (FAA)

Subject: FAA COA request Rankin County Sheriff"s Department MS

Date: Thursday, July 02, 2015 12:22:07 PM

Order 8900 1 Volume 16.docx Aircraft Registration.docx

Public Declaration Letter Guideance.doc

(b) (6), (b) (7)(C)

Attachments:

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, Mr. Steve Pansky an Air Traffic and Law Enforcement/ (6) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, First Responder Agencies that are considering using small UAS for flight operations are considered "public aircraft". The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state

and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached a document that speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
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Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase

II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact me or Mr. John Steventon, (b) (6) with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, July 01, 2015 2:52 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: UAS COA Login

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

<< OLE Object: Picture (Device Independent Bitmap) >>

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Wednesday, July 01, 2015 5:23 PM

To: Reyes-Garcia, Dina (FAA) Subject: RE: UAS COA Login

Ms. Reyes,

Public Agency - Rankin County Sheriff Department 227 N. Timber Street Brandon, MS 39042

Description of UAS - DJI Phantom 2 Plus - 4 blade, 3 axis stabilization gimbal with 14 megapixel/1080p camera

Concept of Operations - The Phantom 2 Plus UAS will be used to assist public safety and search and rescue operations, and will be maintained by the Rankin County Sheriff Department. The UAS will be used to enhance and support tactical operations in Rankin County. SRT(SWAT) and narcotics operations will utilize camera system to provide real-time area surveillance of the target during high risk operations. The ability to provide this aerial view will tremendously enhance office safety. It will also be used to search for fleeing subjects and during BOLO operations, where applicable. A large area of Rankin County is forest land. The ability to use this vehicle to search large areas quickly using the attached equipment will improve the resolution of search operations vs. that of driving vehicles to/from/around search areas. Operations of the Phantom 2 Plus UAS will be at or below 1000 feet AGL.

Please let me know if you need any additional information.

Thanks again,



----Original Message----

From: Dina.Reves-Garcia@faa.gov [mailto:Dina.Reves-Garcia@faa.gov]

Sent: Wednesday, July 01, 2015 12:18 PM

To: (b) (6), (b) (7)

Subject: RE: UAS COA Login

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Wednesday, July 01, 2015 12:10 PM

To: Reyes-Garcia, Dina (FAA) Subject: UAS COA Login

Ms. Reyes,

I am requesting a login to submit a COA request for UAS operations for the Rankin County Sheriff's Department, MS. Please let me know if there is anything else you need from us to get the process started.

Thank you,



County confidentiality disclaimer: The information contained or attached in this electronic message is confidential and may be legally privileged. It is intended solely for the addressee. If you are not the intended recipient, any disclosure, copying, or distribution of the message, or any action or omission taken by you in reliance on it, is prohibited and may be unlawful. Please immediately contact the sender if you have received this message in error. Thank you. In addition, this message has been scanned by Rankin County's spam and virus protection services.

County confidentiality and security disclaimer: Email messages are not confidential when sent to

addresses outside of Rankin County. Please do not reply with or include any information that you consider to be confidential or sensitive in nature which includes but is not limited to: social security numbers, login or passwords, or private constituent data.

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From: Rigol, Henry (FAA)

To: (b) (6)

Cc: Rigol, Henry (FAA); (b) (6)); Steventon, John (FAA)

Subject: FAA COA request-Albany County District Attorney NY

Date: Monday, July 06, 2015 9:06:36 AM

Aircraft Registration.docx Order 8900 1 Volume 16.docx

image001.png

Public Declaration Letter Guidance.doc

Sir,

Attachments:

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Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA) Sent: Sunday, July 05, 2015 7:25 PM To: (b) (6)

Cc: (b) (6)

Subject: FW: Request for UAS COA Online System Account

Steven,

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: oeaaa_helpdesk [mailto:oeaaa_helpdesk@cghtech.com]

Sent: Thursday, July 02, 2015 2:26 PM

To: Reyes-Garcia, Dina (FAA)

Subject: FW: Request for UAS COA Online System Account

From: (b) (6)

Sept: Tuesday, June 20, 2015 10:1

Sent: Tuesday, June 30, 2015 10:18 AM

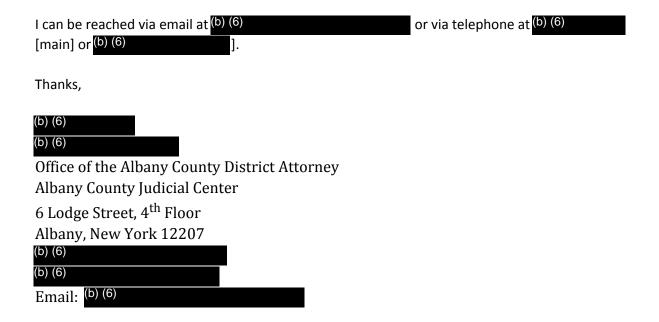
To: oeaaa_helpdesk

Subject: Request for UAS COA Online System Account

Greetings,

My name is (b) (6) and I am a (b) (6) in the Office of the Albany County District Attorney in upstate New York State.

My office is interested in utilizing a UAS for the purposes of gathering aerial images/video of certain areas (e.g., crime scenes) that would be beneficial in the investigation and prosecution of criminal cases in Albany County. I have been assigned to facilitate this project. From my research, it appears that we (as a governmental agency) would need a Certificate of Waiver or Authorization (COA) in order to operate a UA. Furthermore, in order to apply for a COA it appears that we would need to use the UAS COA Online System for which we would need to obtain an account. Therefore, I am writing this email in order to learn what I would need to do in order to obtain such an account. If my understanding is incorrect, please inform otherwise.



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the use of the individual or entity to which it is addressed and may contain confidential and/or privileged information belonging to the sender, including individually identifiable health information

subject to the privacy and security provisions of HIPAA. This information may be protected by

pertinent privilege(s), e.g., attorney-client, doctor-patient, HIPAA etc., which will be enforced to

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examination, analysis, disclosure, copying, dissemination, distribution, sharing, or use of the information in this transmission is strictly prohibited. If you have received this message and associated documents in error, please notify the sender immediately for instructions. If this message

was received by e-mail, please delete the original message.

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(6)

Cc: Rigol, Henry (FAA); (b) (6); Reyes-Garcia, Dina (FAA)

Subject: FAA public COA request Otter Tail County Sheriff's Office

Date: Wednesday, July 22, 2015 10:50:42 AM

Aircraft Registration.docx

Order 8900 1 Volume 16.docx

image001.png

(b) (6), (b) (7)(C)

Attachments:

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 possible alternative courses of action available for each phase of flight, and any outside
 agencies or resources for medical and fire or other assistance) Basically, this is a
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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

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Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, July 21, 2015 12:14 PM To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, July 21, 2015 12:12 PM

To: Reyes-Garcia, Dina (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Dina,

- 1-Otter Tail County Sheriff's Office
- 2-Currently looking at DJI Inspire 1
- 3-Concept of Operation would include use during official law enforcement duties-Search and rescue, tactical operations as well as utilizing during emergency management operations-disaster response.

Please advise if there is any additional information needed.

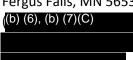
Thanks, (b) (6), (b) (7)



Otter Tail County Sheriff's Office 417 S. Court St.

417 J. Court St.

Fergus Falls, MN 56537



----Original Message-----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Monday, July 20, 2015 6:52 PM

To: (b) (6), (b) (7)(C)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Importance: High

(b) (6), (b) (7)(C)

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reves-garcia@faa.gov.

Thank you.

d.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Monday, July 20, 2015 3:02 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

The Otter Tail County Sheriff's Office located in Fergus Falls, MN is interested in a COA regarding the future purchase of an UAS (Drone) for Law Enforcement functions. I am interested in creating an account to start the application for COA process.

Direct telephone number (b) (6)
Dept General Number 218-998-8555

Thank you for your assistance,

(b) (6), (b) (7)(C)

Otter Tail County Sheriff's Office

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: (b) (6) ; Rigol, Henry (FAA)

Subject: FAA public COA request Valparaiso Police Department, IN

Date: Wednesday, July 22, 2015 12:06:43 PM

Order 8900 1 Volume 16.docx
Aircraft Registration.docx

(b) (6), (b) (7)(C)

Attachments:

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable
 executive acknowledging that the Proponent accepts all responsibility for ensuring that
 the UAS is airworthy and that the it will be operated and maintained in strict compliance
 with the manufacturer's operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, July 22, 2015 8:52 AM

 T_{O} : (b) (6), (b) (7)(C)

Cc:(b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6), who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Wednesday, July 22, 2015 11:01 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

D.,

Thank you for your response. Here is the requested information.

- 1. Valparaiso Police Department 355 Washington St. Valparaiso, IN 46383 TEL: 219-462-2135
- 2. The UAS is a DJI Phantom 3 Advanced (Weight 2.8 lbs).
- 3. The concept of operations will include major accident investigation, crime scene investigation, missing/lost person investigations, search and rescue operations, and disaster surveying.

Please let me know if you need any additional information.

Thank you, (b) (6), (b) (7)(C)

----Original Message-----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Wednesday, July 22, 2015 9:35 AM

To: (b) (6), (b) (7)(C)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Thank you.

(b) (6), (b) (7)

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, July 21, 2015 4:15 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

The Valparaiso Police Department would like to begin the process necessary to use a small drone for several operations. Could you please help us get started with this process. I am (b) (6), (b) (7)(C), the (b) (6), (b) at the Valparaiso Police Department. I can be reached at 219-462-2135 (b) (6), (b) (7)(C) Thank you.

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: (b) (6) Rigol, Henry (FAA); Reyes-Garcia, Dina (FAA); Steventon, John (FAA)

Subject: FAA public COA request Bethlehem Police Department, PA

Date: Monday, July 20, 2015 9:18:21 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx

image001.png

(b) (6), (b) (7)(C)

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Henry Rigol
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From: (b) (6)
Sent: Monday, July 20, 2015 7:56 AM

To: Rigol, Henry (FAA)

Subject: FW: COA question

Importance: High

importance. riigii

One for you. Steve.

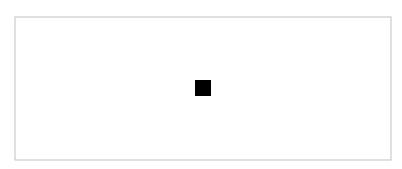
From: Reyes-Garcia, Dina (FAA) Sent: Sunday, July 19, 2015 7:59 PM

To: (b) (6) Cc: (b) (6)

Subject: RE: COA question

Importance: High

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6)

Sent: Saturday, July 18, 2015 2:12 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** COA question

I am the (b) (6). (b) (6). (b) (7)(C) at the Bethlehem Police Department in Bethlehem, PA. We recently purchased a Phantom 3 advanced unit (manufactured by DJI) to assist in fatal accident investigations, homicide scenes, and fire investigations. The Phantom 3 would allow us to not only photo document the scene but also enable us to capture professional quality aerial video footage of the location. I was curious if we need a certificate of waiver or authorization from your agency? Any help would be greatly appreciated. Thank you!

http://www.dji.com/product/phantom-3/feature

The Phantom 3

Weight- 1280g with battery and propellers

Diagonal Size- 590 mm

Max Ascent speed- 5 m/s

Max Descent speed- 3 m/s

Max speed- 16 m/s (ATTI mode, no wind)

Max altitude above sea level- 6000 m

Operating Temperature- 0 to 40 C

GPS Mode- GPS/GLONASS

Camera on Unit

Sensor: Sony EXMOR 1/2.3" Effective pixels: 12.4 M (total pixels: 12.76 M)

Lens: FOV 94° 20 mm (35 mm format equivalent) f/2.8, focus at 8

Video Recording Mode

FHD: 1920x1080p 24/25/30/48/50/60 HD: 1280x720p 24/25/30/48/50/60

(b) (6), (b) (7)(C) (b) (6), (b) (7)(C)

Bethlehem Police Department 10 E. Church St Bethlehem PA 18018 (b) (6). (b) (7)(C) From: Rigol Henry (FAA)
To: (b) (6) (b) (7)(

To: (b) (6), (b) (7)(C)
Cc: Rigol Henry (FAA); (b) (6)

Subject: FAA public COA request Dubuque County Sheriff's Office Iowa

Date: Wednesday, July 22, 2015 11:54:39 AM

Attachments: Aircraft Registration.docx
Order 8900 1 Volume 16.docx

(b) (6), (b) (7)

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The COA process requires inputs to the type of system your office purchased and the registration of the Unmanned Systems.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency

elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that
 the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated
 and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will
 take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC
 and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a ..."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual operational missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for
 each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight
 and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for
 expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC,
 medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and
 VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the
 agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards
 (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any
 attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Hank Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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----Original Message-----

From: (b) (6), (b) (7)(C) Sent: Tuesday, July 21, 2015 9:43 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

- 1) Dubuque County Sheriffs Office
- 2) We have not purchased a UAS yet. (preparations being made for presentation of request to purchase. If waiver would not be granted and it would not be approved to use purchase would probably not be authorized. we get a drivers license before a car) I would propose quad blade (DJI Inspire) or a hexacopter (DJI S900) either camera equipped.
- 3) Would be used for search and rescue, crime scene overview, apprehension of criminals in wooded and farm crop areas.

(b) (6), (b) (7)(C)

Dubuque County Sheriff's Office 770 Iowa St, Dubuque Iowa 52001

(b) (6), (b) (7)(C)

>>> <9-AJV-115-UASCOA@faa.gov> 7/20/2015 7:03 PM >>>

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reves-garcia@faa.gov.

Thank you.

d.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Friday, July 17, 2015 1:41 PM To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

I am (b) (6), (b) (7) with the Dubuque County Sheriffs Office in Dubuque Iowa. I am looking for information or paperwork to obtain the necessary authorization or waiver to obtain and operate an UA as an agency operated aircraft for Law Enforcement purposes.

Respectfully
(b) (6), (b) (7)

Dubuque County Sheriffs Office

(b) (6), (b) (7)

This message has been scanned for malware by Websense. www.websense.com

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA); (b) (6)

Subject: FAA public COA request Mauldin Police Department

Date: Wednesday, July 22, 2015 10:50:29 AM

Attachments: Order 8900 1 Volume 16.docx

Aircraft Registration.docx

(b) (6), (b) (7)(C)

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, Mr. (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: (b) (6) To: (b) (6), (b) (7)(C

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Operating an unmanned aircraft in the National Airspace System

Date: Saturday, June 20, 2015 4:11:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Law Enforcement, Fire and First Responders
Special Airworthiness Certificate-Experimental Category Supporting
Federal Aviation Administration Air Traffic Organization
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6)
To: (b) (6)

Cc: Maibach, Joseph (FAA); Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Adams County Indiana UAS

Date: Saturday, June 20, 2015 4:36:00 PM

Attachments: <u>image001.png</u>

Aircraft Registration.docx Order 8900 1 Volume 16.docx

(b) (6)

For the purposes of public safety and disaster response Mr. henry Rigol from our office will be your point of contact for these types of operations. Rather than send you to Mr. Rigol I will respond to your inquiry and any follow-up questions can be directed to Mr. Rigol. As an introduction, Mr. Rigol is a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. He is one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with myself, an Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)

An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Rigol (202-267-4013) with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Law Enforcement, Fire and First Responders

Special Airworthiness Certificate-Experimental Category Supporting

Federal Aviation Administration Air Traffic Organization

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

(b) (6)

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From: Reyes-Garcia, Dina (FAA) Sent: Friday, June 19, 2015 3:09 PM

To:

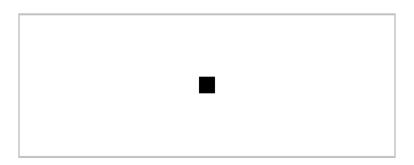
Cc: Maibach, Joseph (FAA); Pansky, Steven CTR (FAA)

Subject: RE: Adams County Indiana UAS

Importance: High

Thank you. Your case has been assigned to Mr. Joseph Maibach, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA

process.



From: (b) (6)

Sent: Friday, June 19, 2015 4:09 PM

To: Reyes-Garcia, Dina (FAA)

Subject: Adams County Indiana UAS

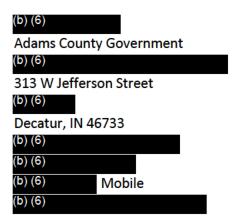
Dina,

I am contacting you on behalf of Adams County Government, Indiana. We are a local government unit that wishes to conduct UAS operations within our county for purposes of Public Safety, Disaster Response, and Aerial Image Acquisition.

The UAS we will use is the eBee UAS from SenseFly. It has a wing span of approximately 3 feet and weighs under two pounds with camera payload and battery.

Our anticipation is to use the UAS in a manner that complies with FAA rules regarding UAS's. We do not have an airport located within our county boundaries that we would interfere with air traffic. The closest airport is Fort Wayne international (FWA) which is 6.75 miles from our closest point in relationship to FWA. We will use the unit for GIS Aerial Mapping, Disaster response (flood mapping and damage assessments), Public Safety (Accident scenes, fire damage, hazardous material spill assessments).

Thank you!



[&]quot;Have you tried turning it off and back on again?"

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: COA to utilize Unmanned Aircraft Systems Provo Police Department

Date: Wednesday, June 17, 2015 8:55:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx

image001.png

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology

supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

Copier Assistion A

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Wednesday, June 17, 2015 2:56 PM

To: (b) (6)

Subject: COA to utilize Unmanned Aircraft Systems Provo Pollice Department

Sir,

I represent the Provo Police Department in Provo, Utah. We would like to apply for a COA to utilize unmanned aircraft systems in law enforcement primarily for Search & Rescue and crime scene documentation with imaging.

(b) (6), (b) (7)



Provo City Police Department 48 South 300 West PROVO, UT 84603

(b) (6), (b) (7)(C) (b) (6), (b) (7)(C) From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: UAS Program

Date: Monday, July 06, 2015 4:20:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx

image001.jpg

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: (b) (6), (b) (7)(C)
Sent: Monday, July 06, 2015 12:51 PM

To: (b) (6) Cc: (b) (6)

Subject: UAS Program

I represent the Orem Police Department in Orem Utah. We would like to apply for a COA to utilize unmanned aircraft systems in law enforcement-primarily search & rescue and crime scene imaging.

Capture			
	_		

From: Rigol Henry (FAA)

To: (b) (6), (b) (7)

Cc: (a) (6)

Steventon John (FAA); Rigol Henry (FAA)

Subject: FAA COA request: City of Columbus, Ohio
Date: Monday, August 10, 2015 1:52:22 PM
Attachments: Aircraft Registration.docx

Aircraft Registration.docx
Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

Hello,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) an Air Traffic and Law Enforcement (b) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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-----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Thursday, August 06, 2015 12:11 PM

To (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

-----Original Message-----

From (b) (6), (b) (7)(C)

Sent: Thursday, August 06, 2015 9:31 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message: ------Hello,

Our agency (City of Columbus, Ohio - Code Enforcement) is interested in utilizing drones to conduct inspections from the air with a UAS to determine if there are violations of City Ordinances related to Environmental Health, Zoning, Housing Codes, etc.

I am wondering if there are other Code Enforcement agencies that conduct inspections with UAS and if doing this would even be permissible in a sometimes urban environment. I am also looking for instructions, a template, or any sort of guidance in completing a COA application. of We are looking into obtaining a COA for utilizing UAS for our law enforcement activities.

I very much appreciate your assistance.

Sincerely,

(b) (6), (b) (7) (C) From: Rigol, Henry (FAA)

To: (b) (6), (b) (7) (1)

Cc: ; Steventon, John (FAA); Rigol, Henry (FAA)

Subject: FAA COA Request: Fishers Police Department Indiana

Date: Monday, August 10, 2015 1:32:19 PM

Attachments: Aircraft Registration.docx

Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx

image001.png image002.jpg image003.jpg image004.jpg

Sir.

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, Mr. (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable
 executive acknowledging that the Proponent accepts all responsibility for ensuring
 that the UAS is airworthy and that the it will be operated and maintained in strict
 compliance with the manufacturer's operational and maintenance
 recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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 flight, and any outside agencies or resources for medical and fire or other

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 Operating Procedures (SOPs) for each phase of flight operation from notification
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 Management, sterile ground control station protocols, PIC and VO standard
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- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

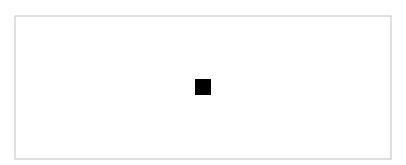
Sent: Thursday, August 06, 2015 2:05 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Fishers Police Department Indiana-COA request

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From: (b) (6), (b) (7)(C)

Sent: Thursday, August 06, 2015 1:25 PM

To: Reyes-Garcia, Dina (FAA)

Subject: Fishers Police Department Indiana-COA request

Hello Ms. Reyes-Garcia,

My name is (b) (6), (b) (7)(C) . I am with the Fishers Police Department, Fishers IN. I am detailed to the (b) (6), (b) (7)(C) . We are interested in purchasing a UAV for aerial photography/video of crime scenes and large scale crash scenes. I met with Mr. James Martin (Principal Operations Inspector IND-FSDO) last week and he provided me with the information we would need to start up the process of obtaining our COA. He said the first step would be to contact you to set up an account. We want to set up a public COA so that several technicians can be trained in the use of the UAV. We have not purchased the UAV or conducted any flights, but we

have determined the model we will be purchasing once we have FAA approval.

Just let me know what steps we need to take next and we will go from there. I look forward to working with you during the process and I thank you in advance for all your efforts to assist the Fishers Police Department with this process.

Respectfully,



www.fishers.in.us



From: Rigol, Henry (FAA)

To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FAA COA request GREENVILLE, OHIO
Date: Monday, August 10, 2015 1:28:47 PM
Attachments: Order 8900 1 Volume 16.docx

Aircraft Registration.docx

image001.png

Public Declaration Letter Guidance.doc

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Respectfully,

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Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

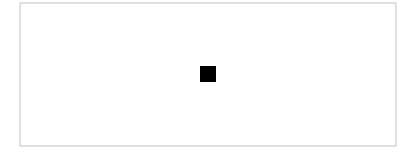
Sent: Thursday, August 06, 2015 2:15 PM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: COA

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From: (b) (6), (b) (7)(C)

Sent: Thursday, August 06, 2015 3:34 PM

To: Reyes-Garcia, Dina (FAA)

Subject: COA

I am (b) (6), (b) (7) of a rural farming community that from time to time is in need of aerial search's for rescue purposes. I would like to know what I need to do to get the appropriate approval to use a drone for my agencies use. Thank you (b) (6), (b) (7) (C)

My Agency: DARKE COUNTY SHERIFF'S OFFICE

5185 COUNTY HOME RD. GREENVILLE, OHIO 45331

(b) (6), (b) (7)(C)

Description of UAS: DJI INSPIRE

Concept of Operation:

- 1. Search and Rescue operations
- 2. Crime scene photography
- 3. Accident scene photography
- 4. Lost children and/or Elderly
- 5. Barricaded or hostage situations

Thank You

(b) (6), (b) (7)(C)

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); (b) (6) Steventon, John (FAA)

Subject: Faa COA Request Hazard Police Department KY

Date: Monday, July 27, 2015 2:30:46 PM
Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx

image001.png

Sir,

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From: Reyes-Garcia, Dina (FAA) Sent: Friday, July 24, 2015 7:11 PM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: Request for access to OE/AAA System

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Thursday, July 23, 2015 6:28 PM

To: Reyes-Garcia, Dina (FAA)

Subject: Request for access to OE/AAA System

Hello,

The Hazard Police Department would like to conduct public safety operations with the use of a Unmanned Aircraft System (UAS). This system would be used in correlation with and abide by current Federal law, State law, and local municipal ordinances. All operations in which the UAS will be used will be conducted under the guidance of a pilot and a spotter. The proposed system is a DJI Phantom 3 Professional Quadcopter which utilizes both GPS and a Vision Positioning System which allows this UAS to maintain its' elevation and lateral travel with minimal input from the pilot. The UAS has several safety features such as return to home which can be automatically activated when the UAS loses radio contact with the controller or if a critical error occurs.

Respectfully,

(b) (6), (b) (7)(C)

Hazard Police Department 800 High ST Hazard, KY 41701 USA

(b) (6), (b) (7)(C)

www.hazardpd.org

NOTICE: This message is intended only for the addressee and may contain information that is privileged, and confidential. If you are not the intended recipient, do not read, copy, retain or disseminate this message or any attachment. If you have received this message in error, please call the sender immediately at (606) 436-2222 and delete all copies of the message and any attachment. Neither the transmission of this message or any attachment, nor any error in transmission or misdelivery shall constitute waiver of any applicable legal privilege.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FAA COA Request Nuckolls County Sheriff, Nelson, Ne

Date: Monday, August 10, 2015 1:44:19 PM

Attachments: <u>image001.png</u>

Aircraft Registration.docx
Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

Sir,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (D) (G) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable
 executive acknowledging that the Proponent accepts all responsibility for ensuring
 that the UAS is airworthy and that the it will be operated and maintained in strict
 compliance with the manufacturer's operational and maintenance
 recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
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will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

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 keeping. SOPs must include, at a minimum, emergency procedures and
 standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

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Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA) **Sent:** Friday, August 07, 2015 6:21 AM To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: FAA

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From: (b) (6), (b) (7)(C)

Sent: Thursday, August 06, 2015 5:38 PM

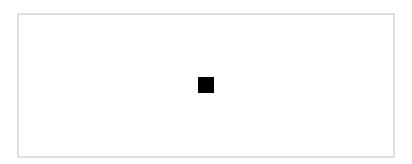
To: Reyes-Garcia, Dina (FAA)

Subject: RE: FAA

Nuckolls county sheriff dept. And nuckolls county emergency management, we have a DJI

Inspire 1, small UAV, less then 4 pounds, we are wanting to use it for Arial photography for disasters and flooding, accident scene photos, limited use search and rescue.

On Aug 6, 2015 4:14 PM, < <u>Dina.Reyes-Garcia@faa.gov</u>> wrote: Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.



From: (b) (6), (b) (7)(C)

Sent: Thursday, August 06, 2015 5:05 PM

To: Reyes-Garcia, Dina (FAA)

Subject: FAA

Dina

I received your email from one of the guys with Nebraska FAA, I was trying to get a username and password set up to get on the FAA website to file for a COA waver for the use of a small drone.

(b) (6), (b) (7)(C)

Nuckolls County Sheriff
PO Box 392
150 S Main, Nelson, Ne 68961
(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Faa COA request: York County Sheriff's Office SC Date: Wednesday, July 29, 2015 9:54:36 AM

Attachments: Order 8900 1 Volume 16.docx

Aircraft Registration.docx

image001.png

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From: Reyes-Garcia, Dina (FAA)

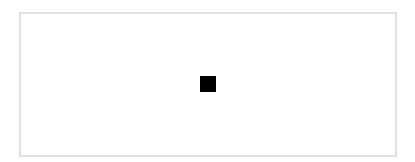
Sent: Tuesday, July 28, 2015 10:11 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA

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From: (b) (6), (b) (7)(C)
Sent: Tuesday, July 28, 2015 11:44 AM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6)
Subject: COA

York County Sheriff's Office

DJI Phantom III Pro

The need and use of an aircraft is imperative for law enforcement today. As you may well know that the operation and maintenance of an aircraft is time consuming and expensive, the use of an Unmanned Aircraft System (UAS) will fill the void that we currently have in our agency. The UAS can be deployed in the general area of an active scene in a matter of minutes reducing the time that officers have to wait to get an aerial view of possibly life threating situations.

The UAS can be deployed to assist in search and rescue calls for service. The UAS will be used to help locate missing children, swift water rescues, missing boater searches, missing hunter searches

and many more searches that the Sheriff's Office will respond to assist with. The aerial view of the active scenes will give command staff and deputies a better understanding of the terrain and be able to locate things quicker than travel by land or water. The UAS will assist in saving lives and locating victims quicker.

Next the UAS will provide for officer safety during K-9 tracts, and Swat Call outs. The use of the UAS during K-9 tracts will serve a twofold function, by allowing the command of these scenes to know the exact location of the K-9 tracking team and also allowing the UAS operator to have visual observation of the suspect to see where he/she is hind and most importantly see if the subject is armed ad waiting to ambush officers. The UAS will also provide crucial real time information for the decision making process during a SWAT call out. This will be a great advantage for the SWAT Team in determining appropriate approach routes, home layout, and over watch function to again feed real time information to command and operators.

A picture from and elevated platform is a vital key in assisting with prosecution of cases. These aerial photographs show proximity to important places and "the bigger picture". The use in evidence collection will allow deputies to obtain photos that can help tie cases together and grant a better understanding of what really happened. The use of aerial photography can often assist the jury who has no training determining or seeing the area of origin in an arson investigation. With the aerial view it is easier to see the more damaged areas, which photos from the ground can sometimes hide. Currently we are limited to the fire department resources or SLED resources that could take some time to acquire there for limiting or delaying the processing of the

Thanks for your time,

(b) (6), (b) (7)(C)

York County Sheriff's Office
(b) (6), (b) (7)(C)

515 S. Cherry Rd.

Rock Hill, SC 29732
(b) (6), (b) (7)(C)

Attention: This email as well as any file(s) transmitted with it, are for the intended recipient (s), and may contain legally protected, confidential or privileged information. If you are not the intended recipient, be advised that you have received this email in error, and that any use, dissemination, forwarding, printing, storing, or copying of this email is strictly prohibited. Please notify the sender if this was received in error and destroy the message, any attachments and all copies.

CONFIDENTIALITY NOTICE: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential, proprietary, and/or privileged information protected by law. If you are not the intended recipient, you may not read, use, copy, or distribute this e-mail message or its attachments. If you believe you have received this e-mail message in error, please contact the sender by reply e-mail or telephone immediately and destroy all copies of the original message.

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); (b) (6) Steventon, John (FAA)

Subject: Faa COA request Warsaw Indiana Police Department

 Date:
 Tuesday, July 28, 2015 7:50:24 AM

 Attachments:
 Order 8900 1 Volume 16.docx

Aircraft Registration.docx

(b) (6), (b) (7)(C)

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- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: (b) (6), (b) (7)(C)

Sent: Monday, July 27, 2015 4:13 PM To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

I am inquiring as to what forms need filed with the FAA for law enforcement use of a UAS/UAV for Search & Rescue missions, Crime/Crash Scene Documentation, SWAT Operations, etc. Is law enforcement exempt for these types of operations? Please specify in the response. Thank you.

(b) (6), (b) (7)(C)

Warsaw Indiana Police Department

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FAA COA request: Waukesha Police Department WI

Date: Thursday, July 30, 2015 2:20:51 PM

Aircraft Registration.docx Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

Attachments:

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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counsel. Please email me your completed letter.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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 that the UAS is airworthy and that the it will be operated and maintained in strict
 compliance with the manufacturer's operational and maintenance
 recommendations.
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- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that
 will be executed at the site in the event of an emergency (this could include
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 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
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Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Operating an unmanned aircraft in the national Airspace System as a Public Aircraft Operator

Date: Thursday, July 23, 2015 3:29:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx



Great to speak with you. Your point of contact for your COA application is Mr. Henry "Hank" Rigol. Hank's contact information is Henry.Rigol@faa.gov, 202-267-4013. Please forward a copy of the public declaration letter from the Jones County Attorney's office to Mr. Rigol via email so he can start the coordination process.

Here is the standard information we provide to individuals and agencies requesting information on operating an unmanned aircraft in the national Airspace System as a Public Aircraft Operator.

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their

appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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 assistance) Basically, this is a .."What will you do if something bad happens?).

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of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)

 An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Law Enforcement, Fire and First Responders
Special Airworthiness Certificate-Experimental Category Supporting
Federal Aviation Administration Air Traffic Organization
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115



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From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Operating an Unmanned Aircraft System in the National Airspace System

Date: Thursday, July 23, 2015 12:18:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx



Great to speak with you. As an introduction, I am a contractor with (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

As I mentioned on the Phone, I copied Mr. Rigol to this email since your agency is located in Florida and as such he would be responsible for assisting you in the development of your unmanned Aircraft Program.

So here is the typical information we provide to interested parties wishing to operate a sUAS in the NAS.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Respectfully,

(b) (6)

Senior Aviation Analyst
Law Enforcement, Fire and First Responders
Special Airworthiness Certificate-Experimental Category Supporting
Federal Aviation Administration Air Traffic Organization
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115



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From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Thursday, July 30, 2015 4:07:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

b) (6)

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA) Sent: Thursday, July 30, 2015 12:10 PM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

We understand that you are just inquiring.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Thursday, July 30, 2015 11:57 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

- 1) Louisiana State Police
- 2) small "quad copter" type model with flight time of 30-40 minutes, range of 1.5 to 2 miles
- 3) primary use would be to gather video/photos of crash scenes, hazardous materials incidents, monitoring of large crowds at festivals, fairs etc. Would be operated by properly trained department members.

Please understand I am NOT requesting a COA at this time. I am conducting research on the possibility of introducing UAV's within my department. I am simply seeking information on the process, ex,,,what are some of the restrictions, cost, time frame of the COA.

Thank you,

(b) (6), (b) (7)(C) (b) (6), (b) (7)(C) 121 East Pont Des Mouton Rd Lafayette, LA 70507 (b) (6), (b) (7)(C)

----Original Message----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Thursday, July 30, 2015 9:01 AM

 $T_{O:}$ (b) (6), (b) (7)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation. You will then be assigned to a Specialist you will assist you with the COA process.

-----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, July 28, 2015 9:45 PM To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

Too who it may concern,

I am proposing the introduction of drones (UAV's) into our police agency for crash investigation, hazardous materials response, crowd control management, etc. I am in the beginning stages of my research and I've noted that public agencies are required to complete a "COA" prior to operating drones. Can you please advise what are the steps for this process and what are the costs associated with this application? Please forward any information to

(b) (6), (b) (7)(C)

Thank You

From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Thursday, July 30, 2015 4:10:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx

(b) (6)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (b) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA) Sent: Thursday, July 30, 2015 12:27 PM

 $T_{0:}(b)(6)$

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message----

From (b) (6)

Sent: Thursday, July 30, 2015 1:04 PM To: 9-AJV-115-UASCOA (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

The agency is Parker County Sheriffs Office - (b) (6)

The unit is a commercially produced DJI Phantom 2 Quad Copter equipped with a video camera with GPS Flight Capabilities

The drone will be used for Law Enforcement purposes to include Tactical, Missing Persons, etc.

Parker County has a population of approximately 130K with the city of Weatherford being the county seat.

----Original Message----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Thursday, July 30, 2015 11:54 AM

 $T_{0:}(b)(6)$

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

----Original Message-----

From: (b) (6)

Sent: Wednesday, July 29, 2015 6:04 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:
----Does a Law Enforcement agency have to apply before using a Drone. We are interested in starting a program.

Weatherford, Texas is a service oriented, yet still "small town" community that upgrades its infrastructure, celebrates and shares its rich history, and fosters quality economic growth—in a fiscally-responsible, even revenue-generating fashion.

This message (and any associated files) is intended only for the use of the individual or entity to which it is addressed and may contain information that is confidential, or subject to copyright. If you are not the intended recipient you are hereby notified that any dissemination, copying or distribution of this message, or files associated with this message, is strictly prohibited. If you have received this message in error, please notify us immediately by replying to the message and deleting it from your computer. Messages sent to and from the City of Weatherford may be monitored.

Internet communications cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. Therefore, we do not accept responsibility for any errors or omissions that are present in this message, or any attachment, that have arisen as a result of e-mail transmission. If verification is required, please request a hard-copy version. Any views or opinions presented are solely those of the author and do not necessarily represent those of the City of Weatherford.

From: (b) (6)
To: (b) (6), (b) (7)(C)

 Cc:
 Rigol, Henry (FAA); Steventon, John (FAA)

 Subject:
 RE: account/password for the OE/AAA System

 Date:
 Wednesday, August 05, 2015 12:57:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx

image001.png

(b) (6), (b) (7)(C)

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(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (b) Liaison Supporting
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Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, August 05, 2015 9:42 AM

To:(b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: account/password for the OE/AAA System

Thank you. Your case has been assigned to (b) (6) who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Tuesday, August 04, 2015 10:19 AM

To: Reyes-Garcia, Dina (FAA)

Subject: account/password for the OE/AAA System

Greetings,

I am (b) (6), (b) with the Escondido Police Department in San Diego County. I would like to establish an account in the OE/AAA System for the purposes of accessing the UAS COA Online System. I was directed to provide the following information to you:

1: Public Agency requesting the COA

Escondido Police Department 1163 N. Centre City Pkwy Escondido, CA 92026

A municipal police agency with 160 sworn officers in North San Diego County

2: small description of the UAS

DJI Phantom3 quad rotor

Weight: 1280 grams 590mm diagonal length Max speed: 16 m/s GPS capability

DJI Lightbridge video transmitter

3: Concept of Operation

The Escondido Police Department would like to develop a Small UAS program to aid in overwatch and intelligence-gathering during critical incidents, to assist in search and rescue operations, to provide photographic and video documentation of crime scenes and vehicle collisions, and to increase officers safety by providing remote surveillance capabilities. At this time, the goal of the agency is to conduct thorough testing and evaluation of a Small UAS system at city-owned shooting range facilities and during planned SWAT training venues that are closed to the public. In compliance with FAA regulations, the Small UAS would be operated by a sworn police officer who possesses a private pilot certificate and a current FAA airman medical certificate. In the future, the program would be integrated into daily operations, and utilize additional Small UAS platforms with greater video and photographic capabilities.

A policy will be developed to outline safety and regulatory requirements of the Small UAS use, documentation, maintenance and comprehensive training for operators. The program will be administered by the department's Assistant Chief and a designated sergeant in charge of monitoring the program and ensuring compliance with the department's policy and FAA regulations, as well as a thorough analysis of the effectiveness and safety aspects of the program.

Respectfully submitted,

(b) (6), (b) (7)(C)

Patrol Division
Escondido Police Department
1163 N. Centre City Pkwy
Escondido, CA 92026
(b) (6), (b) (7)(C)

From: (b) (6) To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: COA Question

Date: Monday, August 03, 2015 8:15:00 AM

Attachments: <u>image001.png</u>

Aircraft Registration.docx Order 8900 1 Volume 16.docx

(b) (6)

As an introduction, Mr. Henry "Hank" Rigol handles individuals and agencies east of the Mississippi however he is on travel this week so I will respond to your request.

I am a contractor with (b) (6)

Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, First Responder Agency small UAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

To answer your questions, 1) we can write a single Certificate of Waiver/Authorization (COA) that can address the operation of a UAS at all of your locations. And (2) The State does not own the airspace. They can surely establish legislation that would not allow someone to launch or recover an aircraft within the State but once the aircraft is airborne it must adhere to provisions established by the Federal Aviation Administration. You would not need a COA if the UAS were flown within the confines of a structure (with a roof) since this is not considered part of the NAS.

The remainder of the information below explains how a public agency applies for approval to operate a UAS in the NAS.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive

CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). In your case you would identify the 16 correctional facilities. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile

ground control station protocols, PIC and VO standard communications and any special mitigation procedures

- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Rigol or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (b)

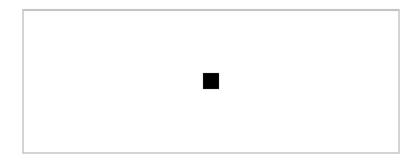
WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: 9-AJV-115-UASCOA (FAA) **Sent:** Friday, July 31, 2015 3:31 PM

To: (b) (6) Cc: (b) (6)

Subject: RE: COA Question

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6)

Sent: Friday, July 31, 2015 10:30 AM

To: 9-AJV-115-UASCOA (FAA) Subject: COA Question

Good Day...

It is our desire to register with the FAA in order to obtain a COA for the 26 State Owned Correctional Facilities (Prisons) located within Pennsylvania... We are looking into the possibility of using UAS (Drones) for surveillance during disturbances... The main question we have is: Does each Prison require a separate COA or are we able to obtain a blanket COA to cover all 26 prisons... I am aware that a NO FLY zone exists over and around our facilities and we needed to know if the COA Requirement even applies since they are State property...

Thanks for your prompt response...

Regards... (b) (6)

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The information transmitted is intended only for the person or entity to whom it is addressed and may contain confidential and/or privileged material. Any use of this information other than by the intended recipient is prohibited. If you receive this message in error, please send a reply e-mail to the sender and delete the material from any and all computers. Unintended transmissions shall not constitute waiver of the attorney-client or any other privilege.

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Guernsey County Sheriff"s Office (OH) COA Application Login Request

Date: Wednesday, August 05, 2015 1:02:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx

image001.png

(b) (6), (b) (7)(C)

As an introduction, Mr. Henry Rigol is our point of contact for those public safety agencies interested in operating a unmanned aircraft system (UAS) in the National Airspace System (NAS) east of the Mississippi. Since Mr. Rigol is out on Travel this week I am responding to Email inquiries for him. My name is (b) (6)

Working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies West of the Mississippi that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be

able to complete the COA online program until your unmanned aircraft is registered.

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 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

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 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
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 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

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(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (b) Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, August 05, 2015 9:49 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA Application Login Request

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Tuesday, August 04, 2015 11:44 AM

To: Reyes-Garcia, Dina (FAA)

Subject: COA Application Login Request

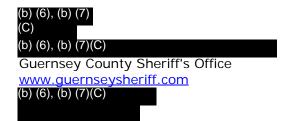
Greetings,

I am requesting an online account for applying for a COA for our new UAS. We recently purchased the RDASS from Leptron Unmanned Aircraft Systems. I am the operator of the newly purchased UAS and am employed by The Guernsey County Sheriff's Office. This unit is owned by The Guernsey County Sheriff's Office and will be used solely for public safety issues. The unit will eventually carry a FLIR system to assist us in locating lost persons or runaways. This unit will also be used to assist all first responders on scenes were an aerial view will assist in preventing injuries and saving lives. It will also be used in law enforcement activities.

The UAS is a quadcopter with capabilities of carrying a 1.5 pound payload. It can be fitted to carry a turret system, FLIR, HD Video/Still. I have provided a link to the manufacturer of the UAS below:

http://www.leptron.com/

Thank you for your time and please let me know if there is anything else I can do to assist you.



From: To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Jennings Police Department, LA Operations of UAS in the NAS

Date: Tuesday, July 28, 2015 1:29:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx

image001.png

(b) (6), (b) (7)(C)

Jennings Police Department

(b) (6), (b) (7)(C)

110 North Broadway Street, Jennings LA 70546

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (b) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: 9-AJV-115-UASCOA (FAA)

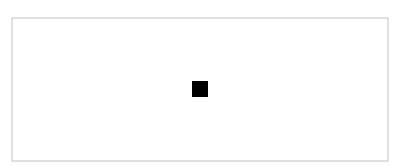
Sent: Tuesday, July 28, 2015 10:22 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

Thank you. Your case has been assigned to (b) (6), who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

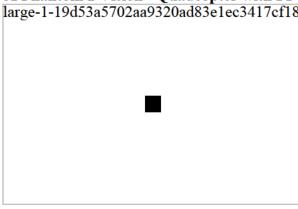
Sent: Monday, July 27, 2015 4:07 PM

To: 9-AJV-115-UASCOA (FAA)

The public agency is the Jennings Police Department out of Jennings LA. Address is 110 North Broadway Street, Jennings LA 70546

The UAS we will be operating is as follows

JI Phantom 2 Vision+ Quadcopter with FPV HD Video Camera large-1-19d53a5702aa9320ad83e1ec3417cf18



- · Super smooth video thanks to the 3-axis gimbal
- Crystal clear stills and live streaming video from the redesigned HD video camera with built-in FPV link
- Extra-long flight times of up to 25 minutes from the intelligent 5,200-mAh battery
- More flight power and security from the high-efficiency self-tightening propellers
- Advanced GPS-based navigation and programmable features you can set up via the built-in USB port

The concept of the operation will be officer safety before and during execution of search warrants, mapping location of crime scenes, and assistance in location of suspects in foot pursuits. The drone will assist in mulitple police operations acting as an eye in the sky watching over any police operation getting a perspective normally unattainable beyond having a manned helicopter or any other similar aircraft. Thank you for your help in this matter.

(b) (6), (b) (7)(C)

Jennings Police Department
(b) (6), (b) (7)(C)

110 North Broadway Street, Jennings LA 70546
(b) (6), (b) (7)(C)

----- Original Message -----

Subject: RE: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

From: 9-AJV-115-UASCOA@faa.gov

Date: 7/27/15 2:32 pm

 T_0 : (b) (6), (b) (7)(C)

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

----Original Message----

From: (b) (6), (b) (7)(C)

Sent: Friday, July 24, 2015 2:34 PM To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: Questions relating to <a href="ww

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/faq/

Message:

I am (b) (6), (b) with the Jennings Police Department in Jennings Louisiana and we have just purchased a UAS for use in an official law enforcement capacity. I was wondering if I could get access to the website and fill out the necessary forms for a COA.

(b) (6), (b) (7)(C)

Jennings Police Department (b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Law enforcement COA

Date: Tuesday, July 28, 2015 6:17:00 PM

Attachments: Aircraft Registration.docx
Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology

supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public

declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (b) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Steventon, John (FAA)

Sent: Tuesday, July 28, 2015 2:21 PM

To: (b) (6)

Cc: Rigol, Henry (FAA)

Subject: FW: Law enforcement COA

Steve.

Could you send (b) (6), (b) (7)(C) the standard information letter?

John

John D. Steventon Aviation Safety Inspector HQ, Federal Aviation Administration Unmanned Aircraft System Integration Office, AFS-84 490 L'Enfant Plaza, Suite 3200, Washington DC, 20024

Phone: (202) 267-8143

E-Mail: john.steventon@faa.gov

From: Posey, Richard (FAA)

Sent: Tuesday, July 28, 2015 12:05 PM

To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: RE: Law enforcement COA

Dear (b) (6), (b) (7)(C)

Please contact John Steventon at 202-267-8143, email <u>john.steventon@faa.gov</u> for Q & A relative to law enforcement operations of UAS.

Richard Posey
Aviation Safety Inspector (Mfg)
Certification Procedures Branch, AIR-110
Design, Manufacturing and Airworthiness Division
Federal Aviation Administration
202-267-1643

From: (b) (6), (b) (7)(C)

Sent: Tuesday, July 28, 2015 11:42 AM

To: Posey, Richard (FAA) **Subject:** Law enforcement COA

Mr. Posey,

My name is (b) (6), (b) (7)(C) , I am a (b) (6), (b) (7)(C) in El Dorado County California. Thank you for taking my phone call this morning.

I am currently assigned to the investigations Office. I was tasked with ascertaining what is required for our department to operate quadcopters during Law Enforcement tasks.

I need information for Law Enforcement information regarding who I talk to and or go through to obtain the proper certificates to be compliant.

Thank you very much for your time.

Respectfully,

(b) (6), (b) (7)(C)

El Dorado County Sheriff Office 471 Peroz Rd. Placerville CA. 95667 (b) (6). (b) (7)(C) From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: (b) (6) ; Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Public COA

Date: Wednesday, August 05, 2015 11:54:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx

image001.png image002.jpg

(b) (6), (b) (7)(C)

As an introduction, Mr. Henry Rigol is our point of contact for those public safety agencies interested in operating a unmanned aircraft system (UAS) in the National Airspace System (NAS) east of the Mississippi. Since Mr. Rigol is out on Travel this week I am responding to Email inquiries for him. My name is (b) (6)

Working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies West of the Mississippi that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Respectfully,

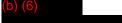
(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (b) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115



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From: Reyes-Garcia, Dina (FAA)

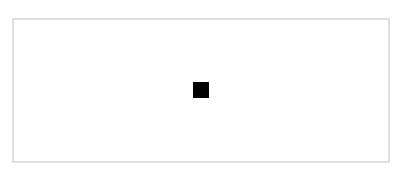
Sent: Wednesday, August 05, 2015 8:15 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Public COA

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Monday, August 03, 2015 3:11 PM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6)

Subject: FW: Public COA

Ms. Garcia

For your consideration,

Springfield Missouri Police Department 321 E. Chestnut Expwy.
Springfield MO, 65802
417-864-1810

3D Robotics SOLO Drone http://3drobotics.com/solo-drone/

I coordinate the operations at a full time Municipal Police Academy in Springfield Mo. We are requesting a Public COA in order to video tape Recruit classes during obstacle course, formation runs and vehicle stop training using a small drone copter. In addition, we will be using the drone to obtain cinematic video for use in production of our Police Department recruiting video. The intention and use of this drone is for training documentation and recruiting video purpose only. It is not intended to be used for law enforcement or surveillance operations. For our purpose, this drone will be flown at low altitude and restricted to visual sight lines. It will not be used for autonomous GPS programmed flights.

I will be the primary operator of the drone and any flight or camera operation will be under my direct supervision.

Please let me know if you need any further information, documentation, etc.

Thank you

(b) (6), (b) (7)(C)



From: (b) (6)

Sent: Monday, August 03, 2015 11:33 AM

To: (b) (6), (b) (7)(C) **Subject:** Public COA

(b) (6), (b) (7)(C)

Please visit the UAS COA website (http://www.faa.gov/uas) to determine if you qualify to request COA On-line access to apply for a Public COA.

If you are a Public entity: (national, state, and local government agencies, as well as public universities)

Email <u>dina.reyes-garcia@faa.gov</u>, the COA On-line administrator:

Provide:

- a. The name of the public entity.
- b. A small description of the UAS.
- c. The concept of operation (small paragraph will suffice).

She will respond to your email in the order it was received.

If your COA activity meets "Public" COA criteria:

- a. She'll create an account for you in the COA On-Line system.
- b. She'll provide you login information.

For more information regarding Certificates of Waiver or Authorization, view the COA website or email the FAA/UAS office at <u>9-AJR-36-UAS@faa.gov</u> with any questions.

(b) (6)

Support Desk Staff 202-580-7500 oeaaa helpdesk@cghtech.com From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: requested information

Date: Tuesday, August 11, 2015 8:07:00 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx

image001.png

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6)

for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology

supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public

declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (b) Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Monday, August 10, 2015 8:01 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: FW: requested information

Thank you. Your case has been assigned to (b) (6) who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Monday, August 10, 2015 11:40 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** requested information

Attached is the Letter of Certification for the Tom Green County Sheriff's Office. We will be operating a DJI Phantom 3 Quad copter for Law Enforcement purposes i.e. search and rescue,

officer safety, public safety, etc.

Description of the Phantom 3:

4k UHD video recording with fully stabilized 3-axis gimbal; Vision Positioning system allows stable flight • Lightbridge digital streaming allows live viewing of 720p video (full resolution video is simultaneously recorded on the internal microSD card) • flight battery and rechargeable remote controller • DJI Pilot app for iOS allows live viewing and complete camera control (phone/tablet)

Style:Quadcopter

The Phantom 3 Professional carries a fully stabilized 3-axis 4k UHD video camera for smooth, crisp videos and still photos. DJI has engineered a new generation of their Lightbridge technology that allows 720p HD digital streaming of live video directly from the drone. The pilot controls the camera and see video in real time as you fly. To aid indoor flying, the Phantom 3 Professional includes an integrated array of optical and ultrasonic sensors call Vision Positioning that allows you to fly precisely indoors without a GPS signal. The Phantom 3 Professional GPS navigation with auto takeoffs and auto landings, intelligent high power flight battery, a built-in safety database of no fly zones, and a powerful mobile app for your iOS or Android device.

Note: DJI has locked the Phantom from being able to even start the motor if you live or plan to operate within a 15 mile radius of the White House. This encompasses not only D.C. but much of Prince Georges County, Arlington, Fairfax, Silver Spring, Falls Church and Montgomery County.

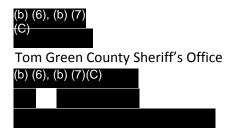
Set Contains:

- Aircraft Body (1)
- •Remote Controller (1)
- Propeller Pairs (4)
- •Intelligent Flight Battery (1)
- Battery Charger (1)
- •Power Cable (1)
- •Phantom 3 Professional / Advanced Safety Guidelines and Disclaimer (Manual) •Phantom 3 Professional / Advanced Intelligent Flight Battery Safety Guidelines (Manual) •Phantom 3 Professional Quick Start Guide (Manual) •Gimbal Clamp (1) •Vibration Absorbers (4) •16GB Micro-SD Card (1) •Micro-USB Cable (1) •Anti-drop Kit (2) •Landing Pads (4) •Propeller Wrench (1) •Stickers (5 Gold, Silver, Red, Blue, Pink)

Phantom 3 Dimensions: 18 x 13 x 8 inches; 9.2 pounds Shipping Weight: 8.9 pounds Domestic Shipping: Item

Item model number: CP.PT.000181

If you need any more information please contact me,



----Original Message-----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Friday, August 07, 2015 9:52 PM

To: (b) (6), (b) (7)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reyes-garcia@faa.gov.

----Original Message-----

From:(b) (6), (b) (7)(C)

Sent: Friday, August 07, 2015 11:21 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

I want to start the application process for COA to operate a drone for the Tom Green County Sheriff's Office



Tom Green County Sheriff's Office



From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); (b) (6) Steventon, John (FAA)

Subject: FAA COA Request: Andover PD, MA

Date: Wednesday, August 26, 2015 9:24:07 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

image001.png image002.png image003.jpg

Sir,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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Respectfully,

Henry Rigol

Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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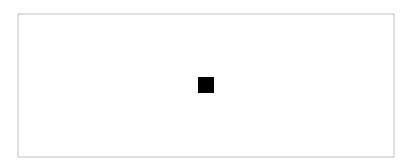
From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, August 26, 2015 9:17 AM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)

Subject: RE: request for COA from Andover MA PD

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Wednesday, August 26, 2015 8:03 AM

To: Reyes-Garcia, Dina (FAA)

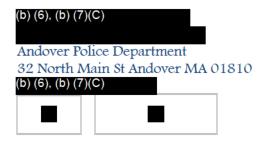
Subject: request for COA from Andover MA PD

To Whom It May Concern,

I am writing this email at the request of an email received from the FAA.gov website (9-AJR-UAS@faa.gov). The Andover Massachusetts Police Department is looking to obtain a certificate of authorization/ waiver from the FAA for use of an unmanned aircraft system. The UAS that we would be deploying is a quad copter manufactured by DJI. The unit is a DJI Phantom 3 professional carrying a small HD camera. The unit is roughly 12 inches by 12 inches by 12 inches and weighs in at 2.8 pounds The maximum flying time is 25 minute per battery.

Our intended use for the UAS is for search and rescue, hazmat scouting, motor vehicle crash reconstruction and aerial photography for planned events. The unit would be operated via line of sight, operating under a 400 foot ceiling.

Any assistance you could provide is greatly appreciated. Thank you in advance,



From: Rigol Henry (FAA)
To: (b) (6)

Cc: Rigol Henry (FAA)

Subject: FAA COA request 104th Precinct Civilian Observation Patrol

Date: Tuesday, August 18, 2015 11:30:12 AM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

Aircraft Registration.docx

Sir,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 **FAA Headquarters** Ph 202-267-4013 henry.rigol@faa.gov

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA) Sent: Tuesday, August 18, 2015 7:43 AM

To:(b) (6) Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6)

Sent: Thursday, August 13, 2015 2:03 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

Good afternoon, My name(b) (6) and I am the (b) (6) of the 104th Precinct Civilian Observation Patrol (104cop.org). We recently acquired a UAV and are seeking to use it to locate missing persons in our precinct while working with the local NYPD. It is unclear to us on how to apply for the appropriate paperwork so the FAA is aware of our intention to use this technology. Could you please assist us? Much appreciated.

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA); Rigol, Henry (FAA)

Subject: FAA COA request: Allendale Police Department, SC

Date: Friday, September 04, 2015 7:03:38 AM
Attachments: Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx Aircraft Registration.docx

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (c) (d) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable
 executive acknowledging that the Proponent accepts all responsibility for ensuring
 that the UAS is airworthy and that the it will be operated and maintained in strict
 compliance with the manufacturer's operational and maintenance
 recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that

will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

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- A review of the agency's UAS training and proficiency program, to include all training records
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 Operating Procedures (SOPs) for each phase of flight operation from notification
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 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520

From: (b) (6), (b) (7)(C)

Sent: Thursday, September 03, 2015 4:39 PM

To: Rigol, Henry (FAA)

Subject: UAS assistance for law enforcement

Henry,

My name (b) (6), (b) (7)(c) and I am (b) (6), (b) (7)(c) with Allendale Police Dept. in South Carolina. I spoke with Orion Cozene with Myrtle Beach PD and he gave me your information. We just purchased a UAS to use for our agency and we are starting from scratch just like Myrtle Beach did. HELP! If you can let me know where we need to start I will glad to do whatever it is going to take. Thanks for any assistance you can offer.

(b) (6), (b) (7)(C)

Allendale Police Department 217 Flat St. E. Allendale, S.C. 29810

(b) (6), (b) (7)(C)

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); (b) (6) Steventon, John (FAA); Maibach, Joseph (FAA)

Subject: FAA COA Request: Atlantic County Prosecutor's Office NJ

Date: Monday, August 17, 2015 3:49:50 PM

Attachments: Aircraft Registration.docx

Public Declaration Letter Guidance.doc

image001.png

Order 8900 1 Volume 16.docx

Sir,

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA) Sent: Friday, August 14, 2015 8:31 AM

To: (b) (6), (b) (7)(C)
Cc: Maibach, Joseph (FAA)
Subject: RE: COA Application

Thank you. Your case has been assigned to Mr. Joseph Maibach, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Thursday, August 13, 2015 12:19 PM

To: 9-AJV-115-UASCOA (FAA) Cc: Reyes-Garcia, Dina (FAA) Subject: RE: COA Application

- 1)The Atlantic County Prosecutor's Office, New Jersey
- 2) The DJI Phantom 3 Professional Flying Camera
- 3)The UAS would be utilized in compliance with existing state laws and departmental policies regarding recording devices and in specific circumstances only. These instances include undercover narcotics and weapons transactions in rural areas of Atlantic County, NJ where otherwise more overt methods of recordation would inhibit the success of the operation and risk officer safety.

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Monday, August 10, 2015 11:21 PM

To: (b) (6), (b) (7)(C)

Subject: RE: COA Application

Please provide the following information: (1) public agency requesting the COA (2) small

description of the UAS and (3) concept of operation.

Please submit to dina.reyes-garcia@faa.gov.

From: (b) (6), (b) (7)(C)

Sent: Monday, August 10, 2015 1:40 PM

To: 9-AJV-115-UASCOA (FAA) **Subject:** COA Application

To Whom It May Concern,

My name is (b) (6), (b) (7)(C) of the Atlantic County Prosecutor's Office, New Jersey and I am inquiring about how to go about getting a COA authorization. Our department has shown interest in purchasing a drone to be used during specific operations and I would like more information on the application process. Thank you.

(b) (6), (b) (7)(C)

Atlantic County Prosecutor's Office

(b) (6), (b) (7)(C)

4997 Unami Blvd.

Mays Landing, NJ 08330

(b) (6), (b) (7)

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C

Cc: Rigol, Henry (FAA)

Subject: FAA COA request Binghamton Police Department NY

Date: Friday, August 21, 2015 10:09:19 AM
Attachments: Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx Aircraft Registration.docx

image001.png

Sir,

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From: (b) (6)

Sent: Friday, August 21, 2015 8:00 AM

To: Rigol, Henry (FAA)

Subject: FW: Binghamton Police Department

Here you go.

From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, August 20, 2015 9:30 PM

To:(b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Binghamton Police Department

Thank you. Your case has been assigned to (b) (6) who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Tuesday, August 18, 2015 1:54 PM

To: Reyes-Garcia, Dina (FAA)

Subject: Binghamton Police Department

Good Afternoon,

My name (b) (6), (b) (7), I am a (b) (6), (b) (7) for the City of Binghamton, located in upstate NY.

The basic answers to the questions asked are as follows.

1) Binghamton Police Department

- 2) At this time we are looking at the DJI Phantom Quad copter, or similar UAV.
- 3) Our purpose is to use the device to conduct search and rescue operations, monitor large gatherings or parades, use as a remote set of eyes in emergency situations, as well as any other Police operation requiring it's use.

Thank You,

(b) (6), (b) (7)(C)

Blnghamton Forensic Unit
(b) (6), (b) (7)(C)

From: Rigol Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Steventon John (FAA); Rigol Henry (FAA)

Subject: FAA COA request Blair County Law Enforcement VA

Date: Thursday, August 20, 2015 8:42:25 AM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

Aircraft Registration.docx

Sir,

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Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: (b) (6), (b) (7)(C)

Sent: Wednesday, August 19, 2015 11:22 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

Good day, my name (b) (6), (b) (7) I am (b) (6), (b) (7)(C) for Association Of Blair County Law Enforcement. A DJI Inspire 1 Drone was donated to us. The drone will only be used for law enforcement emergency situation as search and rescue. It will operated under 400 feet, only during day light and in line of sight by law enforcement. Do we need a certificate of waiver or authorization.

Thank You (b) (6), (b) (7)(C) From: Rigol Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Rigol Henry (FAA); Steventon John (FAA)

Subject: FAA COA Request: Boone County, KY Sheriff"s Office
Date: Tuesday, September 01, 2015 2:57:22 PM
Attachments: Public Declaration Letter Guidance.doc

Aircraft Registration.docx
Order 8900 1 Volume 16.docx

Good Afternoon,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and an Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Respectfully,

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Ph 202-267-4013
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-----Original Message-----

From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, September 01, 2015 2:14 PM

To: (b) (6), (b) (7) Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

-----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, September 01, 2015 2:02 PM

To: Reyes-Garcia, Dina (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Dina Reves-Garcia,

The public agency is the Boone County Sheriff's Office serving Boone County, Kentucky.

We have yet to purchase an UAS opting instead to look into the regulations surrounding the use of one. My best guess would be that it would be a small commercially manufactured unit designed to photograph/video tape incidents on the ground from about 100 to 200 feet in the air.

As the primary law enforcement agency in the county of approximately 130,000 population and 240 square miles we are responsible for investigating all crimes, collisions, and incidents with the exception of the City of Florence, Kentucky. With three major interstate highways (I-71, I-75 & I-275) we foresee it very useful in recording serious multi-vehicle and fatal collision scenes, major case crime scenes and perhaps looking for lost people (children & elderly) in wooded areas. It would simply add another dimensional point of view in our investigations.

As you can no doubt tell, we are only in the study stages of this. Our first consideration was FAA approval since we are home to the Northern Kentucky/Cincinnati International Airport. Any information or advice you can provide is appreciated.

(b) (6), (b) (7)(C)

Public Information Services Boone County Sheriff's Office

(b) (6), (b) (7)

Web: http://www.boonecountyky.org/so

Email (b) (6), (b) (7)(C)

----Original Message-----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Friday, August 28, 2015 8:46 AM

To: (b) (6), (b) (7)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reyes-garcia@faa.gov.

-----Original Message-----

From (b) (6), (b) (7)(C)

Sent: Thursday, August 27, 2015 2:15 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

If we, as the Boone County, KY Sheriff's Office would like to utilize a UAV to photograph outside crime scenes and serious collisions how would we go about it?

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FAA COA request Cartersville Police Department GA

Date: Thursday, August 20, 2015 8:29:48 AM

Attachments: Order 8900 1 Volume 16.docx

<u>Public Declaration Letter Guidance.doc</u> <u>Aircraft Registration.docx</u>

Maj. DiPrima,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, August 19, 2015 8:01 AM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

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----Original Message-----

From (b) (6), (b) (7)(C)

Sent: Tuesday, August 18, 2015 1:53 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Agency: Cartersville Police Department

PO Box 1390

Cartersville, GA 30120

Description of UAS: Inspire 1, quadcopter unmanned aerial system (drone) with GPS, vision positioning technology, and 4k video camera system

Concept of Operation: routine surveillance of sites involving criminal activity to collect intel and possible photographs of evidentiary value; flights within restrictions and of no height above 400 feet; all flights within line of sight

----Original Message-----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Tuesday, August 18, 2015 10:58 AM

To: (b) (6), (b) (7)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

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Please submit to dina.reyes-garcia@faa.gov.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Monday, August 17, 2015 4:46 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

Our agency has purchased a drone for law enforcement operation purposes and needs to obtain a COA. I need assistance with obtaining the COA and opening an account to complete the application.

Respectfully,

(b) (6), (b) (7)(C)

Cartersville Police Department, Cartersville, GA

From: Rigol Henry (FAA)
(b) (6), (b) (7)(C)

Cc: Steventon, John (FAA); Rigol, Henry (FAA)

Subject: Faa COA Request: City of Cullman, Alabama
Date: Thursday, August 27, 2015 1:41:14 PM
Attachments: Public Declaration Letter Guidance.doc

Aircraft Registration.docx Order 8900 1 Volume 16.docx

image001.png

Good Afternoon,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

- An Airworthiness Release (AWR) statement from the Proponent's accountable
 executive acknowledging that the Proponent accepts all responsibility for ensuring
 that the UAS is airworthy and that the it will be operated and maintained in strict
 compliance with the manufacturer's operational and maintenance
 recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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 will be executed at the site in the event of an emergency (this could include
 execution of procedures outlined in the manufacturers supplied operator's flight
 manual, other possible alternative courses of action available for each phase of
 flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual operational missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard
 Operating Procedures (SOPs) for each phase of flight operation from notification
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 standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
 Management, sterile ground control station protocols, PIC and VO standard
 communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, August 26, 2015 10:02 PM

To: (b) (6), (b) Cc: Rigôl, Henry (FAA)

Subject: RE: public operations UAS question

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Wednesday, August 26, 2015 10:41 AM

To: Reyes-Garcia, Dina (FAA)

Subject: RE: public operations UAS question

- 1) Public Agency requesting COA: Cullman Police Department of the City of Cullman, Alabama
- 2) Small description of the UAS: a Phantom 2 Vision+, approximately 1250 grams, maximum speed of up to 15 meters/second, maximum ascent speed of 6 meters/second, control frequency of 5.7-5.8gHz.
- 3) Concept of Operation: To be used to gather imagery for planning of special events or operations, to aid in search and rescue operations, and any other similar need deemed appropriate and safe by the Chief of Police.





From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Tuesday, August 25, 2015 8:43 PM

To: (b) (6), (b) (7)(C)

Subject: RE: public operations UAS question

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reyes-garcia@faa.gov.

From: (b) (6), (b) (7)(C)

Sent: Monday, August 24, 2015 3:54 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: public operations UAS question

I am trying to create an initial account and or start the process to get the proper certification and or waiver for PUBLIC OPERATIONS of a small UAS, a phantom 2 vision quadcopter, for the Cullman City Police Department in Cullman, Alabama. I am a sworn law enforcement officer as well as technology director for my public government agency and wish to get my information and start the formal application process so as to make sure we are legal in operations. (Primarily that of preplanning for special events, and or location of lost individuals)

Thank you, (b) (6), (b) (7)

City of Cullman

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA); Rigol, Henry (FAA); (b) (6), (b) (7)(C)

Subject: FAA COA Request: Drone adoption N.Y.P.D.

Date: Tuesday, August 18, 2015 10:09:31 AM

Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

Aircraft Registration.docx

Sir,

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FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, August 18, 2015 9:57 AM

To: Steventon, John (FAA)

Cc: (b) (6), (b) (7)

Subject: Drone adoption N.Y.P.D.

Hello John, thank you for taking my call earlier even though you are on vacation. Regarding the drone adoption initiative of the technical assistance response unit of the N.Y.P.D. I am requesting information on the requirements needed for my unit to start utilizing drones and drone technology. If you could send information to myself at (b) (6), (b) (7)(C) and my partner (b) (6), (b) (7)(C) it would be Greatly appreciated. I realize you are on vacation, so if you could give us contact information for a co worker that would also be appreciated. We are expecting to do some detailed research this week. I thank you for your time.

(b) (6), (b) (7)(C)

N.Y.P.D

From: Rigol, Henry (FAA)

To: (b) (6), (b)

Cc: Steventon, John (FAA); Rigol, Henry (FAA)

Subject: Faa COA Request: Georgia Public Safety Training Center

Date: Friday, August 28, 2015 9:59:34 AM
Attachments: Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx Aircraft Registration.docx

image001.png

Good Morning,

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Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, August 27, 2015 3:19 PM

To: (b) (6), (b) (7)
Cc: Rigol, Henry (FAA)
Subject: RE: C.O.A.

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From: (b) (6), (b) (7)(C)

Sent: Thursday, August 27, 2015 2:36 PM

To: Reyes-Garcia, Dina (FAA)

Subject: C.O.A.

Ms. Dina Reyes-Garcia,

This correspondence is in reference to my agency's desire to apply for a Certificate of Authorization for a U.A.S.

The applying agency is the Georgia Public Safety Training Center (GPSTC) located in Forsyth, Georgia. GPSTC is a sub-division of the Georgia Department of Public Safety and is a training institution which supports the Georgia Police Academy Division, Georgia Fire Academy Division, Georgia Emergency Management, Georgia State Patrol's training division, Georgia Bureau of Investigation's training division, and Georgia Department of Natural Resources' training division.

The U.A.S. is a DJI Inspire, which is a quad-copter system equipped with a camera for photography and video.

The primary functions of the U.A.S. will be public safety functions. Uses would include, but may not be limited to, filming vehicle crash testing, aerial photographs of roadway intersections, overhead views of firefighting operations, and any other training exercise where an aerial view would prove beneficial to training quality.

There area we desire to operate in is confined to our facility located at 1000 Indian Springs Drive Forsyth, Georgia. Altitudes for these operations would typically be in the 100-300 feet range.

Please let me know if there is more information you need.



(b) (6), (b) (7)(C)

Traffic Section
Georgia Police Academy Division
Georgia Public Safety Training Center
1000 Indian Springs Drive
Forsyth, Ga. 31029

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)
Cc: (b) (6) (5) (6) ; Steventon, John (FAA)

Subject: FAA COA request Livingston County Sherriff's Office NY

Date: Wednesday, August 19, 2015 1:57:59 PM
Attachments: Public Declaration Letter Guidance.doc

Aircraft Registration.docx Order 8900 1 Volume 16.docx

(b) (6), (b)

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- An Airworthiness Release (AWR) statement from the Proponent's accountable
 executive acknowledging that the Proponent accepts all responsibility for ensuring
 that the UAS is airworthy and that the it will be operated and maintained in strict
 compliance with the manufacturer's operational and maintenance
 recommendations.
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The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115

FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: Gardner, Scott (FAA)

Sent: Wednesday, August 19, 2015 1:32 PM

To: (b) (6)

Cc: (b) (6) Rigol, Henry (FAA)

Subject: RE: LEA COAs

Tony,

I don't work the LEO COA's. They are handled by (b) (6) and Hank Rigol, cc'd on this e-mail.

Hope that helps.

Scott

Scott Gardner
Air Traffic Specialist, UAS Tactical Operations Section, AJV-115
FAA Headquarters
800 Independence Ave, Ste 423
Washington, DC 20024
Ph: 202-267-8192

From: (b) (6)

Sent: Wednesday, August 19, 2015 1:27 PM

To: Gardner, Scott (FAA) **Subject:** LEA COAs

Scott,

Are you still working LEA COAs? I got a call from the Sherriff's office in Livingston County NY. They would like to start down the road for a Jurisdictional COA. I told them about the Training COA/Jurisdictional COA program for LEA, and will probably help them with the application.



From: Rigol Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Faa COA request: Lower Makefield Township Police, PA

Date: Friday, September 04, 2015 7:08:01 AM

Attachments: Aircraft Registration.docx
Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

image001.png

Good Morning,

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- An Airworthiness Release (AWR) statement from the Proponent's accountable
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Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

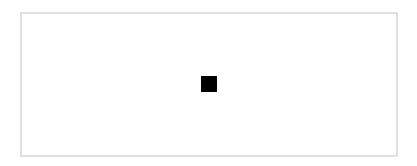
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From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, September 03, 2015 3:13 PM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)
Subject: FW: COA

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Thursday, September 03, 2015 12:09 PM

To: Reyes-Garcia, Dina (FAA)

Subject: COA

Dina,

I had inquired, through the website, about the process for obtaining a COA for a small UAV.

We are a municipal police department in southeast Pennsylvania.

I was informed that I should e-mail you a description of our agency, UAV/UAS and concept of operation.

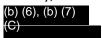
I have attached the above in a Word document. We are still in the planning stages and have not purchased a UAV.

Please let me know what process and requirements/regulations need to be met if we are to move forward.

Thank you,

(b) (6), (b) (7)

Lower Makefield Township Police 1100 Edgewood Road Yardley, PA 19067



From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

To: (b) (b), (c) (7)(c)

Cc: ; Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FAA COA Request Nicollet County Sheriff's Office Mn

Date: Tuesday, August 18, 2015 11:15:51 AM

Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

Aircraft Registration.docx

image001.png

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In reference to your side note, please review the Unmanned Aircraft Systems link http://www.faa.gov/uas/legislative_programs/section_333/. If you have further 333

questions please directed them to <u>333exemptions@faa.gov</u>.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: 9-AJV-115-UASCOA (FAA)

Sent: Tuesday, August 18, 2015 7:08 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Drone Use

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cid:image001.png@01D0D9A4.9D0419E0	

From: (b) (6), (b) (7)(C)

Sent: Wednesday, August 12, 2015 1:54 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Drone Use

Greetings,

My name (b) (6), (b) (7) and I am a (b) (6), (b) (7)(C) icer for Nicollet County Sheriff's Office in Minnesota. My Sheriff, asked me to research information regarding drone

use for law enforcement. The use would be for the SWAT team or what we call it here our Tactical Response Team (TRT). Basically, I need what the process is for our office to legally operate a drone during a high risk or life threatening situations. What certifications are required and how are they acquired. Also, what are the regulations for law enforcement use.

On a side note, I fly for hobby. I am looking at doing aerial photography in my area for pay. I have done my research and found that I would need the Exemption 333 to legally fly for pay. During my research I found that some say you have to possess a private, commercial or sporting license to obtain such exemption. Then some say you don't. I could find any clarification on your website regarding this. Could you please clarify on the process to petition for the exemption 333 and the requirements to obtain such.

I would like to thank you for your time and effort in helping me with my inquiry. You can respond either by email or you can call me on my cell phone (b) (6), (b) (7). If I don't answer, please leave me a message and I will call you right back. Thank you again.

(b) (6), (b) (7)(C) (b) (6), (b) (7)(C)

Nicollet County Sheriff's Office Dispatch: (507) 931-1570 Dispatch Fax: (507) 934-7169 Cc.

Attachments:

(b) (6), (b) (7)

Rigol Henry (FAA); Steventon John (FAA); Faa COA Request: Phenix City Police Department, AL Subject: Wednesday, August 26, 2015 8:43:47 AM Public Declaration Letter Guidance.doc

Aircraft Registration.docx Order 8900 1 Volume 16.docx

image001.png image002.jpg image003.jpg image004.gif image005.pnc image007.jpg

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 VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station
 protocols, PIC and VO standard communications and any special mitigation procedures
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Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: 9-AJV-115-UASCOA (FAA)
Sent: Tuesday August 25 2015 9:40 PM
To: (b) (6), (b) (7)(C)
Cc:
Subject: RE: Certificates of Waiver

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)
Sent: Friday, August 21, 2015 3:53 F
To: 9-AJV-115-UASCOA (FAA)
Subject: RE: Certificates of Waiver

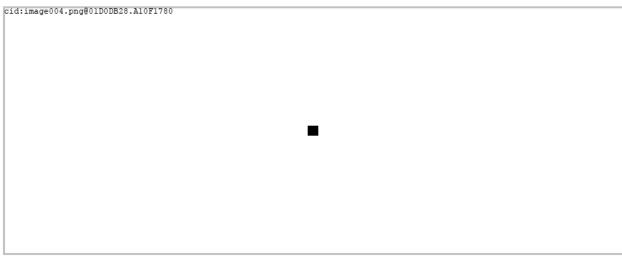
(b) (6), (b) (7)(C) n

Phenix City Police Department, City of Phenix City 1111 Broad Street Phenix City, Alabama 36867 ORI AL05701

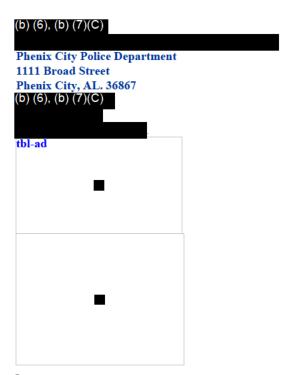
UAS

PHANTOM 3 PROFESSIONAL

WEIGHT (INCLUDING BATTERY AND PROPELLERS) 3pounds DIAGONAL SIZE (INCLUDING PROPELLERS) - 23 inches MAX ALTITUDE (DEPARTMENT SOP) - 400FT



Our department is requesting a certificate of waiver to operate the above listed UAS. It will be used in a safe manner to conduct site surveys, record tactical operations, search and rescue missions and traffic accident reconstruction. We will follow all FAA rules.



Praise be to the LORD my Rock, who trains my hands for war, my fingers for battle. Psalm 144:1

Confidentiality Notice: The information contained in and transmitted with this communication is strictly confidential, is intended only for the use of the intended recipient, and is the property of the sender and owner of the sending domains. If you are not the intended recipient, you are hereby notified that any use of the information contained in or transmitted with the communication or dissemination, distribution, or copying of this communication is strictly prohibited by law. If you have received this communication in error, please immediately return this communication to the sender and delete the original message and any copy of it in your possession.

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

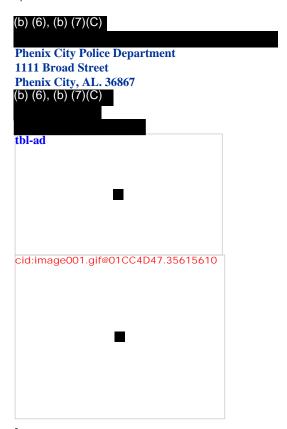
Please submit to dina.reyes-garcia@faa.gov.



From: (b) (6), (b) (7)(C)
Sent: Friday, August 14, 2015 2:39 PM
To: 9-AJV-115-UASCOA (FAA)
Subject: Certificates of Waiver

Our Police Department just purchased two small UAS's do we need Certificates of Waiver or Authorization to legally operate and where do I get the application for the waiver or is a license required.

V/R



Praise be to the LORD my Rock, who trains my hands for war, my fingers for battle. Psalm 144:1

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From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: FAA COA Request: Russellville Police Department, Alabama

Date: Friday, August 14, 2015 5:33:35 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png

Sir.

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (D) (G) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, August 13, 2015 8:50 AM

To: (b) (6), (b) Cc: (b) (6)

Subject: RE: COA

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Thursday, August 13, 2015 11:45 AM

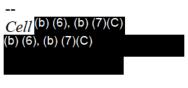
To: Reyes-Garcia, Dina (FAA)

Subject: COA

I was wanting to find out about getting a COA as I am unfamiliar with the process. I am a licensed Private Pilot. I work for the Russellville Police Department in Alabama. I have a Phantom 3 Professions UAS. We were looking at the possibility of using the UAS for

Search and Locate operations, photographing crime scenes, and intel gathering in accordance with State and Federal Laws.

Thanks in advance for your assistance.



(b) (6), (b) (7)(C)

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA); Rigol, Henry (FAA)

Subject: FAA COA request Twinsburg Police Department OH

Date: Friday, August 21, 2015 10:05:37 AM
Attachments: Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx Aircraft Registration.docx

image001.png

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From: (b) (6)

Sent: Friday, August 21, 2015 8:03 AM

To: Rigol, Henry (FAA) **Subject:** FW: Drone

From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, August 20, 2015 9:52 PM

To: (b) (6) Cc: (b) (6)

Subject: RE: Drone

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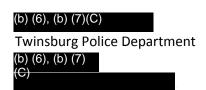
Sent: Tuesday, August 18, 2015 6:22 PM

To: Reyes-Garcia, Dina (FAA)

Subject: Drone

The City of Twinsburg Police Department is requesting a COA for drone operation. City of Twinsburg Police Dept. will be getting a small drone that is capable of high resolution live video for day and night operations. The operation of the drone will be for Police operations such as night

and day search and rescue, apprehending criminals, surveillance, as well as other Police activities.



From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Faa COA Request: Ocean View Police DE Date: Monday, August 24, 2015 12:03:12 PM

Attachments: Aircraft Registration.docx

<u>Public Declaration Letter Guidance.doc</u> <u>Order 8900 1 Volume 16.docx</u>

Sir,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable
 executive acknowledging that the Proponent accepts all responsibility for ensuring
 that the UAS is airworthy and that the it will be operated and maintained in strict
 compliance with the manufacturer's operational and maintenance
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- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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 will be executed at the site in the event of an emergency (this could include
 execution of procedures outlined in the manufacturers supplied operator's flight
 manual, other possible alternative courses of action available for each phase of
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 assistance) Basically, this is a .."What will you do if something bad happens?).

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 Operating Procedures (SOPs) for each phase of flight operation from notification
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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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-----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Friday, August 21, 2015 7:09 AM

To: Reyes-Garcia, Dina (FAA) Subject: Ocean View Police COA

Good Morning Dina Reyes-Garcia,

My name is (b) (6), (b) (7)(C) , I am a (b) (6), (b) (7) the Ocean View Police Department in Ocean View, DE. The Ocean View police department is and has been interested in adding a UAS into our operations.

1. Ocean View Police Department (Ocean View, Delaware) 2. UAS Description - We are still evaluating and testing different UAS. We are strongly considering a DJI Inspire 1 multirotor UAS. The Inspire 1 is a multi-rotor with 4 motor/propulsion systems, weighs approximately 2935 grams, dimensions of the UAS are 438x451x301 mm.

----Original Message-----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Tuesday, August 18, 2015 10:57 AM

To: (b) (6), (b) (7)(C)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

First step:

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to <u>dina.reyes-garcia@faa.gov</u>.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Monday, August 17, 2015 11:21 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

Hello,

The Ocean View Police Department is exploring the option of implementing a UAV as a viable resource in our law enforcement missions as well as assisting our local fire departments, beach patrol, and natural resource police in search and rescue missions. Some questions we have are how and where do we start and what information do we need to get started.

Thank you, (b) (6), (b) (7)(C)

Ocean View Police Department Ocean View, Delaware

From: (b) (6), (b) (7)(C)

To:

Steventon, John (FAA); Rigol, Henry (FAA)

Subject: FAA UAS Application: Alachua, FL Date: Thursday, August 13, 2015 7:20:35 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

image001.png image002.png

Sir.

Cc:

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Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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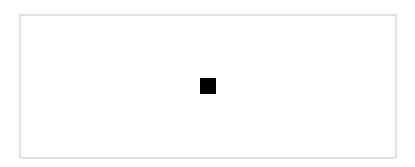
From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, August 12, 2015 6:17 PM

To: Jesse Sandusky

Cc: Pansky, Steven CTR (FAA) Subject: RE: FAA UAS Application

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Tuesday, August 11, 2015 10:26 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** FAA UAS Application

Good Afternoon,

This email is in response to a reply asking for the following information.

1.) Public agency requesting the COA:

The Alachua Police Department is requesting a COA for the operation of a UAS within the corporate city limits of the City of Alachua. Our Public Agency information is as follows:

Alachua Police Department Chief Chad D. Scott 15000 NW 142 Terrace Alachua, FL 32615 386-462-6570

2.) Small description of the UAS:

The UAS to be utilized is a quad-copter design using four rotating blades to provide lift. The UAS is controlled by a remote control utilizing an iPad mini for the display. The UAS provides live streaming video feed from an attached 4K HD video camera. The UAS utilizes satellites for precise flight and is equipped with multiple fail-safe modes to ensure safe flight and return. The UAS is manufactured by DJI Incorporated and the particular model is the Phantom 3 Professional. A complete list of specs can be provided to you if needed.

3.) Concept of operation:

The Alachua Police Department recognizes that UAS type aircraft can be used to potentially violate the rights of a person or persons by infringing on one's privacy. The Alachua Police Department also recognizes the fact that the use of UAS type aircraft can pose a threat to the safety of persons in the area if used improperly or by someone who has not been adequately trained in the use of such aircraft. With that in mind, the Alachua Police Department is developing policies to be set in place for the use of the UAS.

- Use of the UAS will be limited to official police business and must be approved by a supervisor prior to deployment.
- Piloting of the UAS will be conducted by one person who has been trained in the proper use of such aircraft as well as FAA regulations regarding the use of UAS.
- A spotter will be utilized at all times while the UAS is deployed.
- Each deployment of the UAS will be documented to include the pilot, the spotter, the reason for deployment, the location deployed, and the total time of deployment.
- The use of the UAS should be limited to situations where if not utilized, could pose a higher risk to the safety of officers responding to an incident.

Basically, the Alachua Police Department wishes to utilize UAS technology in situations where an "aerial view" of a dangerous situation prior to sending in officers may reduce the risk of injury to officers and citizens alike. The Alachua Police Department continues to develop the policy regarding the use of the UAS and welcomes any input that the FAA may have in regards to such.

Best Regards,

(b) (6), (b) (7)(C)

Criminal Investigations/Public Relations Alachua Police Department (b) (6), (b) (7)(C)

(D) (b), (D) (7)(C)

Click here to find us on Facebook!



From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FW: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Thursday, September 03, 2015 10:23:00 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

To answer your question below, the determination of the approval to operate is based on the location of the intended operating area and its relationship to any major airports that would preclude such an operation. I am familiar with the Chino Airport and if you were to operate within 5 Nautical Miles of that airport we would require the Pilot in command (PIC) to have, as a minimum a private pilot license however all other operations outside of that area would only require the PIC to have completed the FAA private pilot ground school and passed the written exam. These provisions are denoted in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message----

From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, September 02, 2015 10:31 PM

 T_{0} : (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

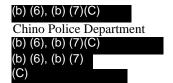
From: (b) (6), (b) (7)(C)

Sent: Wednesday, September 02, 2015 1:04 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

- 1) Chino Police Department: a municipal police department
- 2) We don't have the UAS yet, but I was going to suggest one of the machines that fly autonomously by preset coordinates with return-to-base features if radio signal is lost, winds are too high or battery is low.
- 3) This would be used for police operations such as area canvases, incident over-watch such as in riots or tactical operations, collision reconstruction, mapping, evidence photos and possibly surveillance.



"Problems cannot be solved by the same level of thinking that created them." - Albert Einstein

----Original Message----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Friday, August 28, 2015 05:45

To: (b) (6), (b) (7)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Hi Scott.

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reyes-garcia@faa.gov.

----Original Message----

From (b) (6), (b) (7)(C)

Sent: Thursday, August 27, 2015 1:06 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

Good afternoon. I am looking into the possibility of getting a UAS for our municipal police department. It will likely be an arduous research project in order to purchase a quality machine, but I anticipate two major hurdles; confronting privacy issues and FAA approval. Of course I understand every application would be on a case by case basis, but once the application is fully completed; I was wondering the likelihood of approval for a quality system? For example, what is the denial percentage for government agencies and their applications? One hurdle in the application process is we have an airport in our city, the Chino Airport, ran by the County of San Bernardino. Thank you for your time and assistance with my questions.



From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA); (b) (6), (b) (7)(C)

Subject: FW: Constable, Pct 3 Bexar County Police, TX Date: Tuesday, September 01, 2015 4:58:00 PM

Attachments: <u>image002.png</u>

image003.png

Aircraft Registration.docx Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Eliaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, September 01, 2015 2:16 PM

To: Kedrowski, Mark Cc: Rigol, Henry (FAA) Subject: RE: COA

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)
Sent: Monday, August 31, 2015 2:30 PM

To: Reyes-Garcia, Dina (FAA)

Subject: COA

Hi Dina,

I was redirected to you for help. We are a local government, more precise, Bexar County Constable Pct.3 in San Antonio, TX. We are a Law Enforcement Agency and we recently purchased a drone. The drone is used specifically for:

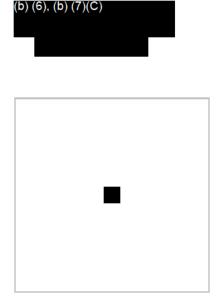
- 1) Search of a suspect in a contained area.
- 2) Search of missing or lost people or evidence.
- 3) Aerial reconnaissance of location prior to a search warrant being executed

It is a small drone: brand - DJI Phantom 3

The drone will not be flown for recreation or private use and will not exceed the allowable limits set forth by the FAA.

If you can help point me in the right direction for licensing or FAA approval or what I need to do in order for us to comply with FAA regulations, I would appreciate it.

Thank you,



Sent at the request of:

(b) (6), (b) (7)(C)

Constable, Pct 3 Bexar County Police 8918 Tesoro Drive, Suite 301 San Antonio, Texas 78217

(b) (6), (b) (7)(C)

www.BexarPolice.com www.facebook.com/constable3 https://twitter.com/Bexar3 http://www.linkedin.com/in/bccpct3/

For questions or comments on the level or quality of service you received by the Constable's Office PCT 3 / Bexar County Police, please contact (b) (6), (b) (7)(C) or by email at (b) (6), (b) (7)(C)

We are a public service organization and your views, critiques or comments are valued.

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Wednesday, August 19, 2015 2:20:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, August 19, 2015 8:09 AM

To (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, August 18, 2015 4:29 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

The public agency will be the Ascension Parish Sheriff's Office. 828 S. Irma Blvd, Gonzales, LA The UAS is a DJI phantom II And the concept of operations will be tactical operations, search and rescue, crime scene, and hazmat incidents.

(b) (6), (b) (<u>7)(C)</u>

ASCENSION PARISH SHERIFF'S OFFICE

(b) (6), (b) (7)(C)

9094 St. Landry Rd., Gonzales LA 70737

(b) (6), (b) (7)(C)

----Original Message-----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Tuesday, August 18, 2015 9:55 AM

To: (b) (6), (b) (7)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reyes-garcia@faa.gov.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Friday, August 14, 2015 5:14 PM To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

please send me any information i need to obtain a COA for my Agency to operate a UAS.

From: (b) (6)
To: (b) (6), (b)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Thursday, August 20, 2015 3:46:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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There are several Issues surrounding the operation of a UAS based on the information you have provided.

- 1. You stated that the UAS will be personally owned. To operate as a public aircraft operator the public agency must either own the UAS or lease the UAS for a period of at least 90 days (exclusive lease).
- 2. The city of Irvine is within the Class C airspace of the John Wayne/ Orange County Airport. We can get approval to operate within this area however the pilot in command will need to be at a minimum possess a private pilot license and have a 2nd class medical. The specifics for this requirement are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16, Chapter 4, Section 16-4-1-3, B.4.

I have also outlined below the standard information I provide to those public agencies wishing to operate within the National Airspace System.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message----

From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, August 20, 2015 11:47 AM

 T_{O} (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to learn more on COAs and the COA process.

-----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, August 18, 2015 11:26 AM

To: Reyes-Garcia, Dina (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Sorry for the omission...

- 1) The agency is the Irvine Police Department in Southern California;
- 2) Our policy restricts our UAS size to less than 5 lbs. It is a personally owned UAS with a camera;
- 3) Our policy will restrict the use to aerial photographs of major crime scenes and traffic accidents. Our policy also will restrict the UAS elevation to less than 400 feet. It should be noted, there is an airport adjacent to our city (Orange County/Santa Ana SNA).

Thank you for your assistance.

(b) (6), (b) (7)(C)

Patrol Bureau

Irvine Police Department

(b) (6), (b) (7)(C) (b) (6), (b) (7)

(C)

Mailing: P.O. Box 19575 | Irvine, CA 92623

----Original Message-----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Tuesday, August 18, 2015 8:00 AM

 T_0 : (b) (6), (b) (7)(C)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reyes-garcia@faa.gov.

----Original Message-----

From (b) (6), (b) (7)(C)

Sent: Monday, August 17, 2015 6:38 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

Our agency is in the process of developing policy pertaining to UAS. Our intent in using a UAS is to document aerial pictures of accident and crime scenes. Our draft policy is VERY limiting and restricts our flight elevation to not more than 400 feet and the UAS weight to be not more than 5 lbs. As a government agency, my understanding is we are required to possess a valid COA even with those restrictions. Can you confirm and provide the best method for certification, please? Thank you.

(b) (6), (b) (7)(C)

Irvine PD

From: (b) (6)
To: (b) (6), (b) (7)(C)

 Cc:
 Rigol, Henry (FAA); Steventon, John (FAA)

 Subject:
 RE: COA San Bernardino Police Department

 Date:
 Wednesday, August 12, 2015 10:21:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx

image001.png

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology

supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
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 for each phase of flight, and any outside agencies or resources for medical and fire or other
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 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
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- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public

declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, August 12, 2015 6:18 PM

Sent: Wednesday To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Tuesday, August 11, 2015 11:28 AM

To: Reyes-Garcia, Dina (FAA)

Subject: COA

I am putting together a UAV program for the San Bernardino Police Department and in the process of completing the research to obtain a COA. I would like to access your online application website.

This is for the San Bernardino Police Department in Southern California. We are looking into purchasing a DJI Phantom 3 to start with. This UAV has a ground control station that transmits off 2.4 GHz on both video and data. The ground control station using a touch screen iPad device to monitor the aircraft. This provides real time information to the PIC of the health of the battery, GPS signal strength, altitude, distance and live video. The Phantom 3 has a range in access of the legal requirements of line of sight flying. In the event of a lost signal, the UAV will automatically return to the place it launched from.

The UAS would be used primarily for crime scene photography, some search and rescue and aerial surveillance as needed and within the legalities of the law.

If there is any more information needed to start this process, I would be more than happy to oblige.

(b) (6), (b) (7)

San Bernardino Police Dept. 710 North D Street San Bernardino, CA 92401

(b) (6), (b) (7)

From: (b) (6)

To: (b) (6), (b) (7)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: UAV Operator

Date: Tuesday, September 01, 2015 4:44:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

We are in the process of upgrading the current public safety agency program to give it greater access into the National Airspace System while allowing those agencies applying to get approval in a more rapid fashion. Having said that I am not at liberty until the program is approved to discuss it any further other than to say the current provisions for a 333 Exemption Commercial sUAS operation under 200 feet will be very similar for the public agency.

I have attached the typical information I provide to public safety agencies wishing to operate in the NAS which is currently in place.

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submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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 to mitigate any attendant hazard for UAS)
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The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move

forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, September 01, 2015 11:33 AM

To: (b) (6)

Subject: UAV Operator

Hi (b) (6)

My agency is looking at implementing a UAV program. They are in the process of applying for a COLA. My question is as an operator what certifications do I need? I attended the ALEA in Phoenix and thought the new guide lines should be coming out this month. Any guidance on this issue would be greatly appreciated.

Thanks(b) (6), (b) (7)(C) (b) (6), (b) (7)(C)

Box Elder County Sheriff Office (Utah) (b) (6), (b) (7)(C) or

From: Rigol, Henry (FAA)
To: (b) (6)

Cc: Rigol, Henry (FAA); (b) (6) Steventon, John (FAA)

Subject: FAA COA for Law Enforcement Puerto Rico Police Force

Date: Tuesday, September 22, 2015 6:11:53 AM
Attachments: Public Declaration Letter Guidance.doc

Aircraft Registration.docx Order 8900 1 Volume 16.docx

image001.png

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (5) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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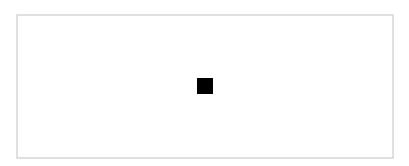
From: 9-AJV-115-UASOrganization (FAA) **Sent:** Monday, September 21, 2015 11:45 PM

To: (b) (6)

Cc: Rigol, Henry (FAA)

Subject: RE: COA for Law Enforcement

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6)

Sent: Thursday, September 17, 2015 8:43 PM

To: 9-AJV-115-UASOrganization (FAA) **Subject:** COA for Law Enforcement

To whom it may concern:

My name is (b) (6)

(b) (6)

exemption no. 11680A with HQ on San Juan, Puerto Rico. Have a client that is a Sgt. in the Puerto Rico Police Force and he is part of a group called "Strike Force" that works side by side with the federal government (FBI, DEA) dedicated to illegal drug trafficking cases. They are extremely interested working with UAS for surveillance on different hotspots in PR, for prosecuting in a court of law.

I will like to apply for a COA on that subject and where I can find information and regulations to make my petition? Thanks!

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); (b) (6) Reyes-Garcia, Dina (FAA); Steventon, John (FAA)

Subject: FAA COA Request: Oxford Police, AL

Date: Wednesday, September 09, 2015 8:28:14 AM

Attachments: Public Declaration Letter Guidance.doc

Aircraft Registration.docx Order 8900 1 Volume 16.docx

image001.png

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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 executive acknowledging that the Proponent accepts all responsibility for ensuring that
 the UAS is airworthy and that the it will be operated and maintained in strict compliance
 with the manufacturer's operational and maintenance recommendations.
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Respectfully,

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From: 9-AJV-115-UASCOA (FAA)

Sent: Tuesday, September 08, 2015 11:45 PM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)

Subject: RE: Oxford Police, AL

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Sunday, September 06, 2015 11:47 PM

To: 9-AJV-115-UASCOA (FAA) **Subject:** Oxford Police, AL

The Oxford Police Department has recently obtained a UAS (DJI Phantom 3) and are curious how to obtain a COA that will allow us to operate for search and rescue missions as well as general photography for promotional and community policing aspects of our department (non-commercial photography).

Please email the specifics or call using the contact information below.

Thank you,

(b) (6), (b) (7)

Oxford Police Department 600 Stanley Merrill Drive Oxford, AL 36203 (DODAAC 2YT18X)

256.831.3121 (Main) (b) (6). (b) (7)(C)

(b) (6), (b) (7)(C)



From: Rigol Henry (FAA)
To: (b) (6) (b) (7

To: (b) (6), (b) (7)(C)
Cc: Rigol Henry (FAA): Steventon John (FAA)

Subject: FAA COA request: Graves County Jail in Mayfield, Ky

Date: Monday, September 28, 2015 11:22:22 AM

Attachments: <u>Aircraft Registration.docx</u>

Public Declaration Letter Guidance.doc Order 8900 1 Volume 16.docx

Good Afternoon,

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----Original Message----

From: 9-AJV-115-UASCOA (FAA)

Sent: Monday, September 28, 2015 10:48 AM

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From (b) (6), (b) (7)(C)

Sent: Thursday, September 24, 2015 3:13 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office org/headquarters offices/ato/service units/systemops/aaim/organizations/uas/coa/

Message:

Hello, I am interested in getting my COA for use of a drone for law enforcement. I am the (b) (6), (b) (7) for the Graves County Jail in Mayfield, Ky. We are interested in using a drone for perimeter checks, job sight checks for work release inmates and to assist other agencies. I am requesting an application to obtain a COA.

Thank You, (b) (6), (b) (7)(C) From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); (b) (6) Steventon, John (FAA)

Subject: FAA COA Request: Groton Police Department, MA

Date: Wednesday, October 07, 2015 12:09:46 PM

Attachments: Public Declaration Letter Guidance.doc

Aircraft Registration.docx Order 8900 1 Volume 16.docx

Good Afternoon,

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Saturday, October 03, 2015 9:42 AM

To: Rigol, Henry (FAA)

Subject: COA

Dear Mr. Rigol,

I am $a^{(b)}(6), (b)(7)(C)$ working at the Town of Groton Police Department. I am interested in obtaining a Certificates of Waiver or Authorization.

Any assistance you could provide would be most helpful.

(b) (6), (b) (7)(C)

99 Pleasant Street Groton MA 01462 (b) (6), (b) (7)(C) (b) (6), (b) (7)(C) From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA); Rigol, Henry (FAA)

Subject: FAA COA Request: Kansas Police Department
Date: Tuesday, September 22, 2015 6:16:51 AM
Attachments: Public Declaration Letter Guidance.doc

Aircraft Registration.docx Order 8900 1 Volume 16.docx

image001.png image002.emz image003.png

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, Mr. (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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 executive acknowledging that the Proponent accepts all responsibility for ensuring
 that the UAS is airworthy and that the it will be operated and maintained in strict
 compliance with the manufacturer's operational and maintenance
 recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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- An emergency procedures document that explains the protocols/procedures that
 will be executed at the site in the event of an emergency (this could include
 execution of procedures outlined in the manufacturers supplied operator's flight
 manual, other possible alternative courses of action available for each phase of
 flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual operational missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
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 Operating Procedures (SOPs) for each phase of flight operation from notification
 for deployment through preflight, launch, recovery, post-flight and mission record
 keeping. SOPs must include, at a minimum, emergency procedures and
 standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
 Management, sterile ground control station protocols, PIC and VO standard
 communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
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Respectfully,

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Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Monday, September 21, 2015 11:01 PM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)

Subject: RE: COA Online Registration

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Thursday, September 17, 2015 9:20 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** COA Online Registration

Hello,

The Kansas City, Kansas Police Department is requesting login for a COA application.

Model UAS used: We currently have a DJI Inspire 1 and possibly purchasing a DJI Phantom 3 Pro and Seeker II with Flir.

Purposes: Used

a. In immediate pursuit of a person law enforcement officers have reasonable

suspicion or probable cause to suspect has committed a felony.

- b. For the purpose of documenting a crime scene where a felony has been committed.
 - c. For the purpose of investigating the scene of:

- 1. A human fatality.
- 2. A motor vehicle accident causing death or serious bodily injury to a person.
- 3. Any motor vehicle accident on a state highway or federal interstate or highway.
- d. In connection with the search for a missing person.
- e. For the purpose of conducting a high-risk tactical operation that poses a threat to human life or private property that is generally open to the public where the property owner consents to law enforcement public safety responsibilities.
- f. For the purpose of fire suppression or rescuing a person whose life is in imminent danger.
 - g. For the purpose of training in officer maneuvers or tactical placement.

Thank You,

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FAA COA request: NYPD Counterterrorism Division

Date: Thursday, October 01, 2015 12:38:06 PM

Attachments: Aircraft Registration.docx

Public Declaration Letter Guidance.doc Order 8900 1 Volume 16.docx

Good Afternoon,

As per our phone conversation, below is an introduction on starting the COA process.

I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) an Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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The POC for the DOD sUAS School is (b) (6), (b) (7)(C)

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: (b) (6), (b) (7)(C)

Sent: Thursday, October 01, 2015 11:16 AM

To: Rigol, Henry (FAA) **Subject:** Contact info

(b) (6), (b) (7)(C)

NYPD Counterterrorism Division

(b) (6), (b) (7)(C)

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From: Rigol Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Rigol Henry (FAA); (6) Steventon John (FAA)

Subject: FAA COA request: Sheriff of Perry County Missouri
Date: Wednesday, September 30, 2015 2:34:40 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

Good Afternoon,

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Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 **FAA Headquarters** Ph 202-267-4013 henry.rigol@faa.gov

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, September 30, 2015 2:19 PM

 $T_0(b)(6), (b)(7)(C)$ Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, September 29, 2015 1:01 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

My name is(b) (6), (b) (7) and I am the. We recently acquired a DJI Phatom 3 Pro UAV and intend to use it for emergency response and other law enforcement/public safety duties. Do we need any special type of waiver or license to operate this unit If we maintain line of sight and less than 400 feet height?

From: Rigol, Henry (FAA)
(b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FAA COA Request: Warren Township Police Department, NJ

Date: Wednesday, September 30, 2015 3:00:34 PM
Attachments: Public Declaration Letter Guidance.doc

Aircraft Registration.docx Order 8900 1 Volume 16.docx

image001.png

Good Afternoon,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (D) (G) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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- An Airworthiness Release (AWR) statement from the Proponent's accountable
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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
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The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, September 30, 2015 2:23 PM

To: Robert Ferreiro **Cc:** Rigol, Henry (FAA) **Subject:** RE: UAV

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Tuesday, September 29, 2015 3:56 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: UAV

Good day,

Our local police department is exploring buying a UAV for search and rescue use within our municipality. What are the exact rules/regulations by the FAA governing use of UAV's by local police departments? We do not plan on flying more then 100-200 feet from the ground. I searched online and on the FAA website but it seems very confusing. Was hoping I can speak with someone that could steer us in the right direction so that we operate within guidelines.

Thank you (b) (6), (b) (7) (C)

(b) (6), (b) (7)(C)

Warren Township Police Department 44 Mountain Blvd. Warren Twp., NJ 07059 (b) (6), (b) (7)(C)

www.warrenpolice.com

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This email message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this

message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying

of this communication is strictly prohibited. If you have received this message in error, please notify us immediately by telephone (908) 753-1149 and delete and destroy the original message.

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From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); (b) (6) Steventon, John (FAA)

Subject: FAA COA request: Yates County Sheriff"s Office, NY Date: Wednesday, September 30, 2015 2:18:49 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png image002.jpg

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, September 30, 2015 2:14 PM

To: (b) (6), (b)

Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

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From: (b) (6), (b) (7)(C)

Sent: Wednesday, September 30, 2015 10:33 AM

To: Reyes-Garcia, Dina (FAA)

Subject: RE: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

(1) public agency requesting the COA:

Yates County Sheriff's Office

(b) (6), (b) (7)(C)

227 Main Street

Penn Yan, NY 14527

(b) (6), (b) (7)

(2) small description of the UAS

UAS is a quadcopter - a DJI Phantom 3 Advance. built-in Lightbridge technology gives complete control over the Phantom 3 and an immersive, live HD view of everything below. Allowing this unprecedented long range is DJI's proprietary quad-antennae design. Each of the four legs of the Phantom 3 contains a high-powered antenna, all constantly broadcasting the live video feed and receiving control commands from any direction. This crucial piece of your flight experience has been engineered specifically for flying camera platforms, making every flight easy, safe, and intuitive. If the Intelligent Flight Battery is running low, or if the Phantom 3 loses the connection with your remote controller for any reason, the aircraft will automatically return to the takeoff point and land safely.

Aircraft Weight (Including Battery And Propellers): 2.82 LBS (1280 g)

Diagonal Size (Including Propellers): 23.2 inches (590mm)

Max Ascent Speed: 11.1 MPH (5 m/s)

Max Descent Speed: 6.71 MPH (3 m/s)

Hover Accuracy: Vertical: +/- 0.5 m

Horizontal: +/- 1.5 m

Max Speed: 35.8 MPH (16 m/s)

Operating Temperature: 32 to 104 F (0°C to 40°C)

Max Flight Time: Approximately 23 minutes

(3) concept of operation.

UAS will be used for aerial video and photographs of traffic accident and crime scene for reconstruction and investigative purposes; search and rescue/missing persons; inspection of public safety communications towers and equipment; barricaded subject and high risk warrant executions.

A member of the Yates County Sheriff's Office specialty equipment unit holds a valid recreational pilot certificate and current FAA airman medical certificate.

Other operation restrictions include but are not limited to:

Daylight-only operations.

Visual line-of-sight (VLOS) only; the unmanned aircraft will remain within VLOS of the operator

or visual observer.

Yield right-of-way to other aircraft, manned or unmanned.

Use of visual observer (VO) who will be able to communicate verbally at all times with the operator

Maximum airspeed of 100 mph (87 knots).

Maximum altitude of 400 feet above ground level.

Minimum weather visibility of 3 miles from control station.

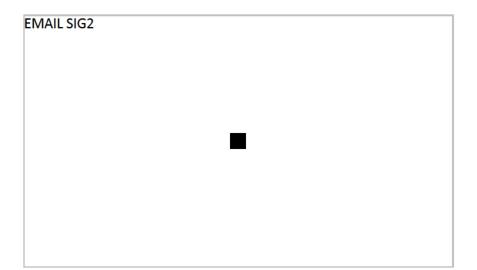
Preflight inspection by the operator.

Operation will remain clear of airports, manned aircraft, and surrounding obstacles.

Will not be operated over crowds or uninvolved persons

Please4 contact me if you have any questions or need more information.

Thank you,



----Original Message-----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Monday, September 28, 2015 10:45 AM

To: (b) (6), (b) (7)

Subject: RE: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reves-garcia@faa.gov.

----Original Message-----

From:(b) (6), (b) (7)(C)

Sent: Thursday, September 24, 2015 11:56 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/faq/

Message:

I am (b) (6), (b) (7)(C) with the Yates County Sheriff's Office in New York state. Our agency is interested in obtaining a COA for public UAS (under 55 lbs) aircraft operations.

From: Rigol Henry (FAA)
To: (b) (6) (b) (7

To: (b) (6), (b) (7)(C)
Cc: (b) (6) Rigol Henry (FAA): (b) (6)

Subject: FAA COA Request: City of St. Peters, Missouri Police Department

Date: Monday, September 28, 2015 11:16:59 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

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From: 9-AJV-115-UASCOA (FAA)

Sent: Monday, September 28, 2015 10:45 AM

 $T_{O}(b)$ (6), (b) (7)(C)

Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

-----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Thursday, September 24, 2015 11:46 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

I am (b) (6), (b) employed by the City of St. Peters, Missouri Police Department. The City of St. Peters is a political subdivision of the State of Missouri. The City is considering purchasing a UAS to be used for law-enforcement (Search, surveillance, trail/park patrol, large event monitoring, etc.) and other usages (Facility, infrastructure and equipment inspection, EOC operations, etc.). At this stage we just plan to purchase a unit for testing to determine whether or not to put a system in place.

From what I've read so far, to do this legally I will need to open a FAA account, have a political subdivision "declaration letter" forwarded, register the not-yet-purchased UAS and then submit the on-line COA application in order to obtain approval for our proposed project. Is this correct or might there be some sort of grace period we can operate under while we decide whether or not this is a worthwhile program? It seems like a lot to have to do before we even make a decision. Please advise and thank you for your time.

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA); (b) (6) Rigol, Henry (FAA)

Subject: FAA COA request: Culpeper County Sheriff"s Office, VA

Date: Tuesday, October 06, 2015 6:47:01 AM

Attachments: Aircraft Registration.docx

<u>Public Declaration Letter Guidance.doc</u> <u>Order 8900 1 Volume 16.docx</u>

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable
 executive acknowledging that the Proponent accepts all responsibility for ensuring
 that the UAS is airworthy and that the it will be operated and maintained in strict
 compliance with the manufacturer's operational and maintenance
 recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
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Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual operational missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

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 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
 Management, sterile ground control station protocols, PIC and VO standard
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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520

From: Steventon, John (FAA)

Sent: Monday, October 05, 2015 2:09 PM

To: Rigol, Henry (FAA); (b) (6)

Cc: (b) (6), (b) (7)(C)

Subject: RE: Drone Questions

Hank,

(b) (6), (b) (7)(C) reached out to me with questions on how to get the ball rolling in requesting for a jurisdictional COA. Please forward him the welcome letter and documents he'll need to apply.

Steve,

In addition he would like to establish contact with any other LEA programs we have approved in this geographical area or one of the other LEA's from other states, like Michigan State Police (MSP), that are willing to share their programs and lessons learned that may be helpful to them in the development of their program.

Thanks,

John

John D. Steventon Aviation Safety Inspector HQ, Federal Aviation Administration Unmanned Aircraft System Integration Office, AFS-84 470 L'Enfant Plaza, Suite 7100, Room 703 Washington DC, 20024

Phone: (202) 267-8143

E-Mail: john.steventon@faa.gov

From: (b) (6), (b) (7)(C)

Sent: Monday, October 05, 2015 1:23 PM

To: Steventon, John (FAA) **Subject:** RE: Drone Questions

Ok ill call in a few

From: (b) (6), (b) (7)(C)

Sent: Monday, October 05, 2015 1:00 PM

To: (b) (6), (b) (7)(C)

Subject: RE: Drone Questions

(b) (6), (b) (7)(C)

Please use my cell # for now until I work out the technical difficulties here at work for my office phone. Currently inop. I can call you or you can call me at (b) (6)

Respectfully,

John D. Steventon Aviation Safety Inspector HQ, Federal Aviation Administration Unmanned Aircraft System Integration Office, AFS-84 470 L'Enfant Plaza, Suite 7100, Room 703 Washington DC, 20024

Phone: (202) 267-8143

Cell: (b) (6)

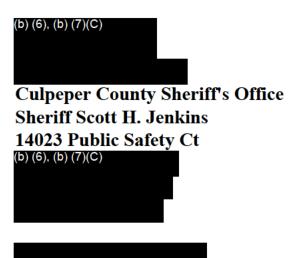
E-Mail: john.steventon@faa.gov

From: (b) (6), (b) (7)(C)

Sent: Monday, October 05, 2015 10:59 AM

To: Steventon, John (FAA) Subject: Drone Questions

I have some questions for you regarding drone use for law enforcement applications. I left a voice mail for you as well.



This E-Mail could be LAW ENFORCEMENT SENSITIVE information and is protected by Code of Virginia unless otherwise noted. Further distribution of this document outside your organization is prohibited; prior written approval shall be obtained from CCSO for dissemination to other agencies. Persons or organizations violating distribution restrictions may be prosecuted and will be prohibited from receiving future documents. NO REPORT OR SEGMENT THEREOF MAY BE RELEASED TO ANY MEDIA SOURCES. Please contact the CULPEPER COUNTY SHERIFF'S OFFICE 540-727-3400/540-727-7520 if you have any questions or need additional information.

FOIA Disclaimer

You are hereby advised that, pursuant to the Virginia Freedom of Information Act, written correspondence (including, but not limited to, letters, e-mails and faxes) from and to the County of Culpeper and its officials and employees, and others acting on its behalf, may be subject to disclosure as being a public record. This includes the e-mail address(es) and other contact and identifying information for parties involved in the correspondence.

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); (b) (6) Steventon, John (FAA)

Subject: FAA COA Request, Darke County Sheriff's Office, OH Date: Tuesday, September 08, 2015 8:28:09 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png

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Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: (b) (6), (b) (7)(C)

Sent: Friday, September 04, 2015 12:03 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** COA request

The Darke County Sheriff's Office is requesting a COA for our DJI Inspire 1 UAS.

Contact: (b) (6), (b) (7)(C)

Darke County Sheriff's Office Toby L. Spencer 5185 County Home Rd. Greenville, Ohio 45331 (937)547-4616

GUIDELINES FOR UAV QUADRACOPTER (DRONE)

Types of calls UAV can be used for:

- Missing children
- Missing/endangered adults
- Fleeing suspects (felony or violent misdemeanor)
- Suicidal persons fleeing on foot
- Barricaded persons / TRT calls
- Over view of fatal crashes (daylight hours only)

- Illegal outdoor marijuana grows / drug manufacturing
- Pre-Planning SRT search warrants
- Aircraft crashes/locating downed aircraft
- Hazmat incidents/Explosives investigations
- Water rescue incidents

What the UAV should not be called for:

- Runaway juveniles (not endangered)
- Traffic crashes that are not of criminal significance
- Non-violent misdemeanor incidents
- Property/residential type searches (there may be some exceptions)
- At NO time will the UAV be used to violate the privacy of anyone that constitutes a violation of the search and seizures laws without the benefit of a search warrant.

UAV OPERATOR GUIDELINES

- Should not be flown within 5 miles of any airport
- Should not be flown in excess of 400 feet in altitude
- Use standard safety practices; stay clear of overheard lines, communications towers, clear landing/take off paths, inclement weather
- One operator for line-of-sight operation of drone, one operator to maintain camera viewer
- Drone should be used line-of-sight unless using waypoint function/auto-pilot flight path
- Log date/time, location, and type of call UAV used for

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); (b) (6) Steventon, John (FAA)

Subject: FAA COA request Somerset County, NJ
Date: Tuesday, September 22, 2015 6:08:49 AM

Attachments: Aircraft Registration.docx

Public Declaration Letter Guidance.doc Order 8900 1 Volume 16.docx

Good Morning,

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Monday, September 21, 2015 1:30 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

My Name is (b) (6), (b) (7)(C) , I'm with the Somerset County Prosecutor's Office in NJ. My agency is exploring the possiblity of purchasing a few UAV's for the purpose of photographing major motor vehicle accidents, conducting search and rescue operations for missing or endangered persons, and possible SWAT operations. Could you please direct me to the the most complete description of the process needed to secure permission to utilize UAv's in this fashion. I realize there are many printed guidelines, but a phone call would be extremely helpful. if this is possible, I can be reached any time at (b) (6), (b) (7)(C). It is my understanding that the default COA prvides for limited use of the UAV to include day light use only. Do to the needs of our agency, night time flight would be needed. Any guideance you could provide would be most appreciated.

Respectfully, (b) (6), (b) (7)(C)

Somerset County Prosecutor's Office

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)

Cc: Steventon, John (FAA); Rigol, Henry (FAA)

Subject: FAA COA Request: West Fargo Police Department UAV

Date: Wednesday, September 16, 2015 12:50:13 PM

Attachments: Public Declaration Letter Guidance.doc

Aircraft Registration.docx Order 8900 1 Volume 16.docx

image001.png image002.jpg

Good Afternoon,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable
 executive acknowledging that the Proponent accepts all responsibility for ensuring
 that the UAS is airworthy and that the it will be operated and maintained in strict
 compliance with the manufacturer's operational and maintenance
 recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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- An emergency procedures document that explains the protocols/procedures that
 will be executed at the site in the event of an emergency (this could include
 execution of procedures outlined in the manufacturers supplied operator's flight
 manual, other possible alternative courses of action available for each phase of
 flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual operational missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard
 Operating Procedures (SOPs) for each phase of flight operation from notification
 for deployment through preflight, launch, recovery, post-flight and mission record
 keeping. SOPs must include, at a minimum, emergency procedures and
 standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
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 communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, September 16, 2015 12:05 PM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)

Subject: RE: COA for the West Fargo Police Department UAV

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

Henry-sorry if I already sent this to you.

d.

cid:ima	ge001.png	@01D0F0	079.6249	39C0	

From: (b) (6), (b) (7)(C)

Sent: Wednesday, September 16, 2015 11:01 AM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6)

Subject: COA for the West Fargo Police Department UAV

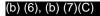
Dina,

My name is (b) (6), (b) (7)(C) with the West Fargo Police and I have been tasked with starting the UAV program for our department. The program is in the infancy stage but I believe that a COA is required for operations of the drone. I was given your name by our local FAA representative. I have attempted to go through the FAA website to obtain the COA or even a login and have been

unsuccessful. I am requesting any information about how to proceed to obtain the COA.

The West Fargo Police Department will be using a Bebop Parrot Drone within the city for primarily search, rescue and recovery efforts. Should the drone be asked to participate in an investigation, state and federal laws will be followed per guidelines.

Please let me know how to proceed.



West Fargo Police Department 800 4th Ave E Suite 2 West Fargo, ND 58078





From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FW: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Wednesday, September 16, 2015 12:42:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

b) (6)

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-----Original Message-----From: Rigol, Henry (FAA)

Sent: Wednesday, September 16, 2015 4:09 AM

 $T_{O:}$ (b) (6)

Cc: Rigol, Henry (FAA)

Subject: FW: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Good Morning

One of yours

Respectfully,

Henry Rigol

Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Tuesday, September 15, 2015 7:23 PM

 T_0 (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to learn more on COAs and the COA process.

-----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Friday, September 11, 2015 11:26 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:	
Hi	

I am (b) (6), (b) at the Lubbock Police Department in Lubbock, Texas. We are currently looking at purchasing a UAS that weighs 6.4 lbs. Will we need any paperwork completed to operate this UAS for the primary purpose of photographing crime scenes?

Thank you for your time,

(b) (6), (b) (7)

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FW: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Thursday, September 24, 2015 4:59:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (b)

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----Original Message----

From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, September 23, 2015 10:44 PM

 $T_{O:}$ (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to (b) (6), (b)

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Wednesday, September 23, 2015 4:21 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

I am a (b) (6), (b) (7) in the State of Arizona. I am looking to submitting a proposal to deploy UAVs in a law enforcement capacity. I would like an understanding of what we need to do in order to be in compliance with the FAA while deploying UAV's. Is there any information that you can provide that will assist me in the endeavor, specifically about the certificate of Authorization/waiver?

From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc:Rigol, Henry (FAA); Steventon, John (FAA)Subject:FW: 9-AJV-115-UASCOA@faa.gov

Date: Wednesday, September 16, 2015 2:56:00 PM

Attachments: <u>image001.png</u>

Aircraft Registration.docx
Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

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agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

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Senior Aviation Analyst

Air Traffic and Law Enforcement/ (b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Rigol, Henry (FAA)

Sent: Wednesday, September 16, 2015 8:04 AM

To: (b) (6)

Subject: FW: 9-AJV-115-UASCOA@faa.gov

Steve.

One of yours

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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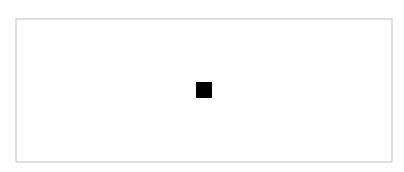
From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, September 16, 2015 10:11 AM

To: (b) (6), (b) (7)
Cc: Rigol, Henry (FAA)

Subject: RE: 9-AJV-115-UASCOA@faa.gov

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Wednesday, September 16, 2015 6:26 AM

To: Reyes-Garcia, Dina (FAA)

Subject: 9-AJV-115-UASCOA@faa.gov

- 1. The city of Paris Police Department, Paris Texas
- 2. Maxsur 'Seeker 640' UAS with HD color and FLIR cameras
- 3. Search and rescue operations, surveillance of crimes in progress, looking for fleeing suspects, aerial photography of crime scenes, accident scenes.



Paris Police Department 2910 Clarksville Street Paris, TX 75460





OPEN RECORDS NOTICE: This email and any responses may be subject to the Texas Open Records laws and may be disclosed to the public upon request. Please respond accordingly.

From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FW: COA

Date: Thursday, September 24, 2015 4:59:00 PM

Attachments: <u>image001.png</u>

Aircraft Registration.docx
Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

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(b) (6)

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Air Traffic and Law Enforcement/(b) (6)

Liaison Supporting
Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, September 23, 2015 9:14 PM

To: (b) (6)
Cc: Rigol, Henry (FAA)
Subject: RE: COA

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cid:image001.png@01D0F644.C172A730

From: (b) (6)

Sent: Monday, September 14, 2015 4:44 PM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6)
Subject: COA

Madam,

My name is (b) (6). I am a Special Agent and commercially rated pilot for the Oklahoma State Bureau of Investigation. I am writing you to begin the process of applying for exemption to operate a UAS under the Oklahoma State Bureau of Investigation (OSBI).

The OSBI is a state-wide investigative agency with statutory authority to investigate crimes against the public to include to include but not limited to homicide, sex crimes, child crimes, white collar and public corruption. The OSBI currently operates a Cessna 206 single engine aircraft that is used for a myriad of tasks to include aerial surveillance, aerial photography and transportation of personnel.

I have reviewed the decision flow chart for public aircraft operations and determined under the State Government Aircraft Operations the OSBI is a public aircraft operator. The OSBI is requesting a Certificate of Waiver or Authorization (COA) permitting the OSBI to operate a UAS within the state of Oklahoma.

The OSBI has received training on the American Drones LLC Phoenix 650 hexacopter and intends to use that UAS to conduct pre-raid aerial surveillance of locations for tactical unit safety and for aerial photography of crime scenes. The OSBI will operate the UAS within line-of-sight at all times in day VFR conditions.

Please advise me on the application process from this point forward.

Sincerely,

(b) (6)

Oklahoma State Bureau of Investigation

(b) (6)

From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FW: UAS- Folsom CA Police

Date: Friday, September 25, 2015 11:42:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

Importance: High

(b) (6), (b) (7)(C)

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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State

Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Morra, Joseph (FAA)

Sent: Friday, September 25, 2015 6:21 AM

To: Gore, Scott (FAA); Lozano, Jana (FAA); Amend, Erik (FAA); Steventon, John (FAA); (b) (6)

Cc: Corbett, Danielle (FAA)

Subject: RE: UAS- Folsom CA Police

Importance: High

John or Steve:

Please reach out to law enforcement today as referenced below. Thank you.

Scott: Danielle Corbett is an ASI working for me and she will be helping to quickly coordinate high profile requests. Please include her on upcoming email that we need to coordinate to the regional or field levels for answers. Thanks.

Joe Morra Manager, AFS-84 (Operations) Unmanned Aircraft Systems Integration Office 202-267-6521

From: Gore, Scott (FAA)

Sent: Friday, September 25, 2015 7:44 AM

To: Lozano, Jana (FAA); Morra, Joseph (FAA); Amend, Erik (FAA)

Subject: Re: UAS- Folsom CA Police

Thanks Jana.

AUS -- Can someone reach out to the law enforcement contact below and answer their questions? Thx

Scott

Sent from my Blackberry

From: Lozano, Jana (FAA)

Sent: Thursday, September 24, 2015 04:49 PM

To: Gore, Scott (FAA)

Subject: UAS- Folsom CA Police

Scott – Just got a call from a CA police department that was looking to speak with someone and seeking more information about UAS. It sounded like they haven't applied for any exemptions but he was trying to understand everything that needs to be done now and for operation so he can prepare his internal proposal appropriately. Told him I would pass your information to him and you would contact him tomorrow.

(b) (6), (b) (7)(C)

Folsom California Police Department



Jana Lozano
Congressional Liaison
Office of Government and Industry Affairs | FAA
800 Independence Ave SW | Washington, DC 20591
T 202.267.3277 | Jana.Lozano@faa.gov

From: (b) (6)

To: (b) (6), (b) (7)

Cc: Thilmany, Allan (FAA); Morris, Kevin (FAA); Crudden, Michael (FAA); Nelson, David R (FAA); Reyes-Garcia, Dina

(FAA); Foisy, Mark (FAA); Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Hennepin County Sheriff"s Office UAS

Date: Wednesday, September 16, 2015 4:19:00 PM

Attachments: <u>Aircraft Registration - Copy.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

I have provided you with the basic information we send out to interested agencies that wish to operate a UAS in the NAS but to answer your questions on the Public Declaration letter...

- Is the letter submitted via email or Registered Mail?
 The letter can be submitted via email to Jacqueline Jackson who's contact information is in the attachment (Public Declaration Letter Huidence.doc) however we typically tell the proponent that if they could send a copy of the letter from their county or state attorney's office to us we will start the coordination process since the letter sent to Ms. Jackson will be forwarded to us for processing.
- Does it need to be submitted on Official Letterhead?
 The letter must be on official letterhead from the agency making the declaration. In your case this would be either the Hennepin County Attorney's Office or the Minnesota Attorney General's Office.
- 3. Does it need to be submitted by the Chief Law Enforcement Officer (Sheriff) or can it be submitted by the Project Coordinator who holds the rank of Lieutenant? The letter must come from either the Hennepin County Attorney's Office or the Minnesota Attorney General's Office. The Hennepin County Sheriff's Office cannot self certify they are a political sub-division of the State of Minnesota.
- 4. What basic information should be included? Is it necessary to identify intended uses, policies, areas of operation, and the manufacturer of the drone that will be used?

The attachment above will speak to the requirements that must be addressed within the letter but basically four items need to be addressed.

- a. The letter must be dated and signed by the agency making the declaration.
- b. The letter must call out the public agency they are addressing (in this case it will

- be the Hennepin County Sheriff's Office).
- c. The letter must reference that the agency is a political sub-division of the State of Minnesota for the purposes of Title 49 USC 40102A(41) (C) or (D) and call out the Minnesota Statue (Section 299C.01).
- d. Declare that the agency will not operate the UAs for Commercial purposes and as such will be in compliance with Title 49 USC 40125b.

So, the Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard

communications and any special mitigation procedures

- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement/(b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, September 15, 2015 10:13 PM

To: Nelson, David R (FAA)

Cc: (b) (6), (b)

Subject: Hennepin County Sheriff's Office UAS

Mr. Nelson,

Thanks again for taking time out last week to discuss the public UAS COA application process for the Hennepin County Sheriff's Office. I have reviewed the information you provided and the UAS portal on the FAA website.

I have a few questions on how to submit the "Declaration Letter" to begin the process:

- 1. Is the letter submitted via email or Registered Mail?
 - 2. Does it need to be submitted on Offical Letterhead?
 - 3. Does it need to be submitted by the Chief Law Enforement Officer (Sheriff) or can it be submitted by the Project Coordinator who holds the rank of Lieutenant?
 - 4. What basic information should be included? Is it necessary to identify intended uses, policies, areas of operation, and the manufacturer of the drone that will be used?

We have been given a 3 to 6 month goal by our Command Staff to be operational. With that timeline in mind, we would like to get the declaration letter submitted by the end of this week in order to be granted access to the COA application portal and begin the process.

I am Special Deputy with the Sheriffs Office and primary certificated pilot who will operate the UAS. My supervisor is the UAS Project Coordinator and I will be working with him to complete the COA application. His name is (b) (6). (b) (7)(C) and I have forwared your contact informaton to him as well as the Law Enforcement Guidance for Suspected Unauthorized UAS operations.

I appreciate your assisantce as begin the COA application process.

Thanks again,

(b) (6), (b) (7)
(C)
Special Deputy Hennepin County Sheriffs Office
(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6)

Cc: <u>Lapray, Carl (FAA); Rigol, Henry (FAA); Steventon, John (FAA)</u>
Subject: RE: UAV Policy for The University Of Utah Police Department

Date: Thursday, September 17, 2015 2:11:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6)

I apologize for the delay in responding to the introduction email string. As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Lapray, Carl (FAA)

Sent: Wednesday, September 09, 2015 3:13 PM

To: (b) (6)

Cc: Chew, Byron (FAA) (b) (6)

Subject: UAV Policy for The University Of Utah Police Department

(b) (6)

I appreciated talking with you yesterday and have found the contacts who can help you develop your departments policy for UAV's. The FAA has established a position to help on law enforcement issues and be your primary source for answers to policy questions. You may call (b) (6), (b) (7) at (b) (6), (b) (7)(C) or email him at (b) (6), (b) (7)(C)

Last week I received a UAV briefing from Byron Chew who gave me Steve's name today. Byron is also very knowledgeable about UAV policy and can be a good alternate source if needed. You may reach Byron at (425)203-4513 or at Byron. Chew@faa.gov.

If there is anything further I can do to help, let me know.

Best Regards,

Carl Lapray
Technical Operations Manager
Salt Lake City Air Route Traffic Control Center

From: Rigol, Henry (FAA)

To: 9-AJV-115-UASCOA (FAA); (b) (6), (b) (7)

Cc: Reyes-Garcia, Dina (FAA); (6) Rigol, Henry (FAA)

Subject: COA request: St. Bernard Parish Sheriff"s Dept Date: Tuesday, October 20, 2015 1:07:29 PM

Attachments: Order 8900 1 Volume 16.docx

Aircraft Registration.docx

Public Declaration Letter Guidance.doc

Good Afternoon,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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 that the UAS is airworthy and that the it will be operated and maintained in strict
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 for deployment through preflight, launch, recovery, post-flight and mission record
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 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
 Management, sterile ground control station protocols, PIC and VO standard
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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
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The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out.

Please feel free to contact (b) (6)
Respectfully,
Henry Rigol

Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520

----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Tuesday, October 20, 2015 12:43 PM

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Reyes-Garcia, Dina (FAA)

Subject: RE: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, October 20, 2015 9:24 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/fag/

Message:

Dina Reyes-Garcia

FAA

Washington, DC 20510

Dear Ms. Reyes-Garcia

This letter is to respectfully request your help regarding this department obtaining a COA

for the operation of a small UAS within the jurisdiction of St. Bernard Parish, Louisiana. This department is currently reviewing the DJI Inspire 1 UAS for purchase. This aircraft is a multi-blade platform, which allows for controlled flight. Additionally the Inspire 1 has return home feature in case of loss of signal and automated landing features.

The purpose of this UAS will be strictly used for Law Enforcement Operations, such as surveillance, search and rescue, and tactical operations within the St. Bernard Parish Jurisdiction.

(b) (6), (b) (7)(C)

St. Bernard Parish Sheriff's Dept Chalmette, LA 70043 (b) (6), (b) (7)(C) From: Rigol, Henry (FAA)

To: (b) (6), (b)

Cc: Reyes-Garcia, Dina (FAA); (b) (6) Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FAA COA Request: Anoka County Sheriff"s Office, MN Date: Wednesday, October 21, 2015 10:15:38 AM

Attachments: Order 8900 1 Volume 16.docx

Aircraft Registration.docx

Public Declaration Letter Guidance.doc

image001.png image002.jpg image003.png

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

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- An Airworthiness Release (AWR) statement from the Proponent's accountable
 executive acknowledging that the Proponent accepts all responsibility for ensuring
 that the UAS is airworthy and that the it will be operated and maintained in strict
 compliance with the manufacturer's operational and maintenance
 recommendations.
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 assistance) Basically, this is a .."What will you do if something bad happens?).

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Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, October 20, 2015 3:22 PM

To: (b) (6), (b) (7)
Cc: Rigol, Henry (FAA)

Subject: RE: Anoka County Sheriff's Office COA

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Tuesday, October 20, 2015 12:28 PM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6), (b) (7)(C)

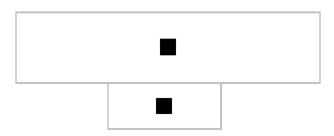
Subject: Anoka County Sheriff's Office COA

The Anoka County Sheriff's Office is requesting a COA for a UAS. The UAS we are looking at purchasing the NMotion UAS InstantEye. (www.nmotionuas.com) The UAS would be used as a search and rescue tool as well as a tool for emergency operations such as SWAT where a suspect is at large or we need to gain an overview of an incident to ensure the safety of our deputies/officers as well as the public in Anoka County Minnesota.

I look forward with working with you to get our COA and our UAS program operational.

Thanks,

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NOTICE: Unless restricted by law, email correspondence to and from Anoka County government offices may be public data subject to the Minnesota Data Practices Act and/or may be disclosed to third parties.

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)

Cc: Reyes-Garcia, Dina (FAA); Rigol, Henry (FAA); (b) (6)

Subject: FAA COA Request: Barron County Sheriff, WI
Date: Tuesday, October 27, 2015 9:44:57 PM
Attachments: Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx Aircraft Registration.docx

image001.png

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (D) (G) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, October 27, 2015 2:50 PM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)

Subject: RE:

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From: Chris Fitzgerald [mailto:chris.fitzgerald@co.barron.wi.us]

Sent: Tuesday, October 27, 2015 1:09 PM

To: Reyes-Garcia, Dina (FAA)

Subject:

The Barron County Sheriff's Dept has purchased a drone to use on SWAT Team Call Outs, locating of missing and wanted subjects and

public relation events.

INSTANT EYE made by Darley and Physical Science -is a highperformance, low-cost aerial system that can be hand-launched, flown and hand-recovered by a single person in any weather. Less than one pound, the vehicle can can go from a stowed configuration to airborne in under 30 seconds and provide rapid situational awareness and tactical sensor operation for up to 30 minutes.

We have about 10 people trained in operation of it and use it emergency operation. We have a policy on the use of it also.

Let me know what the next step is to make sure our dept is compliant with all the rules.





From: Rigol, Henry (FAA)

To: Reyes-Garcia, Dina (FAA); (b) (6), Rigol, Henry (FAA)
Cc: (b) (6) Steventon, John (FAA)
Subject: FAA COA Request: Dale County Sheriff's Office, AL

Date: Tuesday, October 20, 2015 3:12:08 PM
Attachments: Public Declaration Letter Guidance.doc

Aircraft Registration.docx
Order 8900 1 Volume 16.docx

image001.png

Good Afternoon,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (5) (6) and Air Traffic and Law Enforcement (15) (6) and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, October 20, 2015 2:25 PM

To: (b) (6), (b)

Cc: Rigol, Henry (FAA) Subject: RE: COA

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)
Sent: Wednesday, October 14, 2015 10:37 AM

To: Reyes-Garcia, Dina (FAA)

Subject: COA

I am enclosing the following info for your office to obtain a log in for the web site for the COA's. We are in the process of submitting our COA at this time. I am not sure if I need this log in now or does it come after the COA approval?

Thanks in advance for your help.

Public Entity

Dale County Sheriff's Office

Description of UAS

Dale County Sheriff's Office will operate INDAGO manufactured by Lockheed Martin. The INDAGO 's autopilot has a high degree of pre-programmed control and various built-in technical capabilities that strictly limit the potential for operation outside of the operating conditions set forth in the exemption application. The INDAGO's autopilot has an all-digital software platform with advanced features previously restricted to full size unmanned aircraft. Automated features and advanced fly-safe controls enable safe, reliable operation, as well as advanced networking capabilities and system

extendibility.

- The system will be flown in manual mode at all times.
- Flight time and battery minutes are displayed at all times. The system will return home and land automatically if user-configurable limits are reached
- Flight safety is a priority, no matter the operating environment or project. SUAS offer superior safety over manned aircraft by removing the need for people to be onboard in potentially dangerous situations. With multiple built-in safety features, SUAS platforms are comparable to manned operations with respect to safety
- The INDAGO automatically detects potential issues with configurable automated response behavior such as a return-home and automatic-landing routines
- The INDAGO self-calibrates all of its sensors and performs required failsafe pre-flight tests prior to takeoff to check for errors
- The INDAGO has the ability to automatically return to base in a loss of link situation so the aircraft can't fly horizontally or vertically beyond the pre-planned flight area
- The INDAGO has battery minutes and flight time displayed at all times. The system will return home and land automatically if user-configurable limits are reached
- The INDAGO auto-detects a loss of GPS, warns the pilot and initiates a landing based on user specified timelines
- Low battery on the INDAGO triggers a return to base for landing and battery replacement
- If the INDAGO detects a loss-of-link with the Ground Control Station the vehicle will return to base and perform an automatic landing at the takeoff point or other user defined return home point

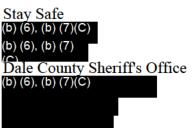
Concept of Operations

Dale County Sheriff's Office is a located in rural area of Southeast Alabama. Dale County is approximately 561.15 square miles. Our agency operations consist of enforcement of all public laws, protection of the county's court system, drug enforcement, search and rescue etc. We operate our own law enforcement aviation unit which consists of three helicopters and one airplane. Our missions cover a wide range of operations from surveillance, search and rescue,

firefighting, swat, and patrol. Our aviation unit also supports a program called Project Lifesaver which is a system that consists of a small transmitter that is worn by persons that have cognitive disorders such as Autism, Down syndrome, and Alzheimer's.

Primary uses of the UAS will be Project Lifesaver search and rescue operation conducted by the Dale County Sheriff's Office. Other applications in the future will be tactical operations with SWAT such as hostage barricaded subject with weapons etc.

--



From: Rigol Henry (FAA)
To: (b) (6)

Cc: Rigol Henry (FAA): (6)
Subject: FAA COA Request: Fire Department Griffin, GA
Date: Tuesday, October 27, 2015 9:31:01 PM
Attachments: Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx Aircraft Registration.docx

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and
 that the it will be operated and maintained in strict compliance with the manufacturer's operational and
 maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual operational missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

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----Original Message----

From: 9-AJV-115-UASCOA (FAA)

Sent: Tuesday, October 27, 2015 11:17 AM

To: (b) (6)

Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6)

Sent: Friday, October 23, 2015 2:38 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Hello.

Griffin Fire-Rescue 401 North Expressway Griffin, GA 30223

DJI Phantom 2 with HD Camera, Remote.

We purchased the UAS to gather intel on hazardous materials scenes, lost persons, and aerial observations for training activities.

Thank you





-----Original Message-----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Friday, October 23, 2015 11:23 AM

To: Tommy Jones <(b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reves-garcia@faa.gov.

Once you provide this information, you will be assigned to a Specialist who will assist you with the COA process and required documentation.

----Original Message-----

From: (b) (6)

Sent: Thursday, October 22, 2015 4:22 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

Hello, I am the (b) (6) , GA and requesting to begin the process of obtaining a COA for our unmanned aerial device. Can you please get me started?

CONFIDENTIALITY: The information transmitted is intended only for the person or entity to which it is addressed and may contain confidential, proprietary, and/or privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon this information by persons or entities other than the intended recipient is prohibited. If you received this email in error, please notify the sender and delete the material from all computers.

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)

Cc: Reyes-Garcia, Dina (FAA); (b) (6) Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FAA COA request: Flowood, MS Police Department Date: Saturday, October 24, 2015 5:15:53 PM

Attachments: Public Declaration Letter Guidance.doc

Aircraft Registration.docx Order 8900 1 Volume 16.docx

image001.png image002.png image003.png

(b) (6), (b) (7)(C)

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Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
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FAA Headquarters
Ph 202-267-4013
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From: Reyes-Garcia, Dina (FAA)

Sent: Friday, October 23, 2015 12:06 PM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)

Subject: RE: LEO On-Line Assess Request

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Friday, October 23, 2015 12:05 PM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6), (b) (7)(C)

Subject: LEO On-Line Assess Request

Our agency is currently attempting to apply for a law enforcement COA regarding unmaned aircraft.

I was referred to you to assist us in obtaining the necessary credentials needed for system access.

The information I was told you needed is the following:

Name of Public Entity:

Flowood, MS Police Department

_

Description of the UAS:

Make: DJI

Model: PV331 4 blade Phantom

(b) (6), (b) (7)(C) (b) (6), (b) (7)(C)

_

Concept of Operation:

The Flowood Police Department intends to utilize a small UAS for tactical intelligence collection on criminal investigations, missing persons, fugitive and SWAT missions.

The UAS would be used by sworn Law Enforcement Officers to provide real-time photo/video (e.g. raid planning and drug site reconnaissance) and also reactively (e.g. fugitive or search and rescue missions).

The UAS would greatly benefit the Flowood Police Department to collect real-time photo/video color/IR data and transmit to Law Enforcement Officers to provide another level of officer safety, situational awareness and ability to find and avoid hazardous conditions/persons.

Thank you for your consideration,



From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Reyes-Garcia, Dina (FAA); Rigol, Henry (FAA); (b) (6) Steventon, John (FAA)

Subject: FAA COA Request: Henry County Missouri
Date: Saturday, October 24, 2015 5:09:42 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png

Sir,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (D) (G) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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 recommendations.
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- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that

will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual operational missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard
 Operating Procedures (SOPs) for each phase of flight operation from notification
 for deployment through preflight, launch, recovery, post-flight and mission record
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 standards for expected scenarios (e.g. lost-link, lost communications between VO
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 Management, sterile ground control station protocols, PIC and VO standard
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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: 9-AJV-115-UASCOA (FAA)

Sent: Friday, October 23, 2015 11:17 AM

To: (b) (6), (b)

Cc: Rigol, Henry (FAA); Reyes-Garcia, Dina (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Wednesday, October 21, 2015 1:14 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Dina: Following is the Information you Requested.

1. Agency - Henry County Missouri Emergency Management

220-B South Washington St. Clinton, Mo. 64735 660-885-7200 Courthouse (b) (6), (b) (7)(C)

- 2. UAS Description UTO-U960 (MJX -600) Hextacopter which is my personal UAV and would like to use as beginner Trainer. I plan on going to the UAS like the DJI INSPIRE 1 with dual controllers with max range of 2 miles and 25 min flight time. As we have very limited budgets we would be in the price range of \$5000.00 to \$10,000 Range.
- 3. Concept of operation. Henry County Joint Emergency Concept of Operations would be to utilize the UAS to assist Fire Service, and Law Enforcement in Search and Rescue, Building Collapse, Hazardous Scene Analyses, Planning and to gather information to ensure Responders life safety, and Life Safety of the public. Damage Assessment in areas unable and unsafe to enter. These UAS would not be used by Law Enforcement for surveillance of e legal activities unless an threat to Life Safety existed.

On Tue, Oct 20, 2015 at 6:21 PM, < 9-AJV-115-UASCOA@faa.gov > wrote: Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to <u>dina.reyes-garcia@faa.gov</u>.

Once you provide this information, you will be assigned to a Specialist who will assist you with the COA process and required documentation.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, October 20, 2015 3:15 PM

To: 9-AJV-115-UASCOA (FAA)

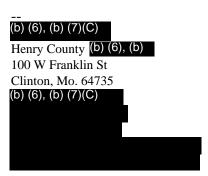
Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

Sirs. I am the (b) (6), (b) (7)(C) for Henry County Missouri. I am wanting to know what the emergency services agencies in my county have to do to comply with the Rules on UAV ans UAS. We plan on trying to use them for Search and Rescue RECON and Hazmat or other areas to ensure safety to Responders safety and aid in life safey of the public. Please let me know what I need to do to get the proper Training and knowledge we need.

(b) (6), (b) (7) Henry County Mo. (b) (6), (b)



From: Rigol Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Reyes-Garcia Dina (FAA); Rigol Henry (FAA); (6)
Subject: FAA COA Request: LaGrange County Sheriff"s Department, IN

Date: Tuesday, October 27, 2015 9:36:10 PM
Attachments: Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx Aircraft Registration.docx

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and an Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and
 that the it will be operated and maintained in strict compliance with the manufacturer's operational and
 maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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----Original Message-----

From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, October 27, 2015 11:45 AM

To: (b) (6), (b) (7) Cc: Rigol, Henry (FAA)

Subject: RE: UAS COA REQUEST

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

-----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Wednesday, October 21, 2015 1:33 PM

To: Reyes-Garcia, Dina (FAA) Subject: UAS COA REQUEST

Hello Dina,

Please find the following information as requested by the previous FAA Email regarding the start of the COA process for a small UAS to be used and operated by the LaGrange County Sheriff's Department located at 0875 S. State Road 9 LaGrange, IN 46761.

- (1) Public agency requesting COA LaGrange County Sheriff's Department
- (2) Small description of UAS DJI Phantom 3 Advanced Quadcopter Spec Sheet information below. Photo Attached

Weight (including battery and propellers)

1280 g

Diagonal size (including propellers)

590 mm

Max Ascent Speed

5 m/s

Max Descent Speed 3 m/s **Hover Accuracy** •Vertical: +/- 0.1 m (when Vision Positioning is active) or +/- 0.5 m •Horizontal: +/- 1.5 m Max Speed 16 m/s (ATTI mode, no wind) Max Altitude Above Sea Level 6000 m **Operating Temperature** 0°C to 40°C **GPS Mode GPS/GLONASS** Camera Sensor Sony EXMOR 1/2.3" Effective pixels: 12.4 M (total pixels: 12.76 M) Lens FOV 94° 20 mm (35 mm format equivalent) f/2.8, focus at 8 ISO Range 100-3200 (video) 100-1600 (photo) Shutter Speed 8s -1/8000s Image Max Size 4000 x 3000 Still Photography Modes •Single Shot •Burst Shooting: 3/5/7 shots •Auto Exposure Bracketing (AEB): 3/5 •Bracketed Frames at 0.7EV Bias •Time-lapse Video Recording Modes Phantom 3 Advanced

•2.7K: 2704 x1520p 24/25/30 (29.97) •FHD: 1920x1080p 24/25/30/48/50/60 •HD: 1280x720p 24/25/30/48/50/60 Supported SD Card Types

Micro SD

Max capacity: 64 GB. Class 10 or UHS-1 rating required

Max Bitrate of Video Storage

Phantom 3 Professional 60 Mbps Phantom 3 Advanced 40 Mbps

Supported File Formats

•FAT32/exFAT

•Photo: JPEG, DNG

•Video: MP4, MOV (MPEG-4 AVC/H.264)

Operating Temperature

0°C to 40°C

Gimbal

Controllable Range

Pitch -90° to +30°

Stabilization

3-axis (pitch, roll, yaw)

Vision Positioning

Max Velocity

Less than 8 m/s (when 2 m above ground)

Altitude Range

50 cm-300 cm

Operating Range

50 cm-300 cm

Operating Environment

Surface with clear pattern and adequate lighting (Lux > 15)

Remote Controller

Operating Frequency

2.400 GHz-2.483 GHz

Max Distance

2000m (outdoors and unobstructed)

Video Output Port

USB **Operating Temperature** 0°C-40°C Battery 6000 mAh LiPo 2S Mobile Device Holder For tablet or phone Receiver Sensitivity (1%PER) -101 dBm ±2 dBm Transmitter Power (EIRP) •FCC: 20 dBm •CE: 16 dBm Working Voltage 1.2 A @7.4 V **Battery Charger** Voltage 17.4 V Rated Power Phantom 3 Advanced •57 W Intelligent Flight Battery Capacity 4480 mAh Voltage 15.2 V **Battery Type** LiPo 4S Energy 68 Wh Net Weight

365 g

Max Flight Time

-10°C to 40°C Max Charging Power 100 W App / Live View Mobile App DJI GO **EIRP** 100mW Power Spectral Density 6.9mW/MHz Live View Working Frequency 2.4GHz ISM Live View Quality 720P @ 30 fps (depending on conditions and mobile device) Latency 220ms (depending on conditions and mobile device) Required Operating Systems •iOS 8.0 or later Android 4.1.2 or later **Recommended Devices** •iOS: iPhone 5s, iPhone 6, iPhone 6 Plus, iPad Air, iPad Air Wi-Fi + Cellular, iPad mini 2, iPad mini 2 Wi-Fi + Cellular, iPad Air 2, iPad Air 2 Wi-Fi + Cellular, iPad mini 3, and iPad mini 3 Wi-Fi + Cellular. This app is optimized for iPhone 5s, iPhone 6, and iPhone 6 Plus •Android: Samsung tabs 705c, Samsung S6, Samsung S5, Samsung NOTE4, Samsung NOTE3, Google Nexus 9, Google Nexus 7 II, Ascend Mate7, Nubia Z7 mini, SONY Z3 EXPERIA, MI 3, MI PAD

(3) Concept of Operation -

Approximately 23 minutes

Operating Temperature

The LaGrange County Sheriff's Department would like to use this small lightweight UAS for the following types of operations with a maximum altitude generally not to exceed 300 feet with a maximum flight altitude of 400 feet and within line of sight and with an operator and a spotter. Inspection of UAS to be done before and after each flight.

Crash scene investigations

Missing persons

Assess weather damage - Tornados, Severe Weather, Flooding Assist with fire damage investigations Investigative tool Investigating Structure Damage Special Operations Team support Assist building department with photography Assist Code Enforcement with photography Lake investigations and locating water emergencies Please advise how to proceed.

Thank you for your time and assistance,

(b) (6), (b) (7)(C)

LaGrange County Sheriff's Department

0875 S. State Road 9 LaGrange, IN. 46761 (b) (6), (b) (7)

-----Original Message-----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Tuesday, October 20, 2015 12:32 PM

To: (b) (6), (b) (7)(C)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reves-garcia@faa.gov.

Once you provide this information, you will be assigned to a Specialist who will assist you with the COA process and required documentation.

Thank you.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Sunday, October 18, 2015 1:57 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

I would like to apply for an account in order to apply for a COA for a UAS Aircraft for a pubic safety agency. Please advise how to proceed.

(b) (6), (b) (7)

LaGrange County Sheriff's Department LaGrange, IN. 46761 (b) (6), (b) (7)

CONFIDENTIALITY NOTICE: This e-mail transmission and any attachment hereto contains information from the County of Lagrange. The information is intended for the sole use of the individual or entity to which it is addressed. If you are not the intended recipient, or an agent responsible for delivering it to the intended recipient, your use, dissemination, forwarding, printing or copying of this information is prohibited. If you received this e-mail in error, please notify us immediately by e-mail, and delete the original message.

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA)

Subject: FAA COA Request: Loudoun County Sheriff Office , VA

Date: Thursday, October 08, 2015 1:21:10 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

image001.png image002.png image003.png

Good Afternoon,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Respectfully,

Henry Rigol

Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520

From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, October 07, 2015 10:56 AM

To: (b) (6), (b) (7)
Cc: Rigol, Henry (FAA)

Subject: RE: COA APPLICATION for UAV / UAS for law enforcement agency

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Tuesday, October 06, 2015 4:41 PM

To: Reyes-Garcia, Dina (FAA)

Subject: COA APPLICATION for UAV / UAS for law enforcement agency

Hello Ms. Reyes-Garcia,

I am a (b) (6), (b) (7) of the Search and Rescue / Project Lifesaver Team for Loudoun County Sheriff Office and would like to obtain a COA and any other FAA certifications required for the Loudoun County Sheriff Office to use a UAV /UAS. Specifically used by the LCSO Search and Rescue Project Lifesaver Team for lifesaving efforts. Lockheed Martin has just released the below UAV/UAS with the Project lifesaver antenna a payload. The UAV / UAS will assist our Search and Rescue PLS Team with locating and recovery of missing endangered person within our county and adjoining jurisdictions as a mutual aid.

We are purchasing a Indago VTOL Quad Rotor

http://www.lockheedmartin.com/us/products/procerus/quad-vtol.html

Specifications:

Endurance: 40 min (w/ 200g payload)

Payload: swappable, -integrated a Project Lifesaver antenna,10mp EO/IR and 30x Optical zoom

Range: 2km line-of-sight, 5km+ with external patch antennas

Weight: 4.85lbs (2,220g) with payload

Dimensions (LxWxH):

Open: 32x32x7 inches Folded: 12x9x6 inches

Operating Altitude: 10-500ft AGL (typical)

Thank You

b) (6), (b) (7)(C)

Loudoun County Sheriff Office Patrol Division-803 Sycolin Road, SE P.O. Box 7200

Leesburg, VA 20177-7200

Email: (b) (6), (b) (7)(C)

Cell- (b) (6), (b) (7)



CONFIDENTIALITY/PRIVACY NOTICE - This email and any attachments to it may be confidential and are intended solely for the use of the individual to whom it is addressed. Any views or opinions expressed are solely those of the author and do not necessarily represent those of the Loudoun County Sheriff's Office.

If you are not the intended recipient of this email, you must neither take any action based upon its contents, nor copy

or show it to anyone. Please contact the sender if you believe you have received this email in error.

From: Rigol Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Rigol Henry (FAA); (6)

Subject: FAA COA Request: Marshall County Iowa Sheriff"s Office

Date: Tuesday, October 27, 2015 9:33:22 PM
Attachments: Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx Aircraft Registration.docx

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and an Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and
 that the it will be operated and maintained in strict compliance with the manufacturer's operational and
 maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual operational missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of
 the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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-----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Tuesday, October 27, 2015 11:23 AM

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Monday, October 26, 2015 3:59 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

I've been operating a quad-copter for over 4 years for search and support with my agency. With the initial rulings that came out nearly 2 years ago, I grounded the units I had. Over the past year my agency has had several situations for searching lost individuals and searching for fleeing felons where the units would have been of great help. With the recent media attention on the registration of units, I wanted to re-activate the program. Please advise me how I can secure an account with the FAA so that I can complete the process necessary.

Thank you. (b) (6), (b) (7)(C)

Marshall County Iowa Sheriff's Office

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Reyes-Garcia, Dina (FAA); (b) (6) Steventon, John (FAA); Rigol, Henry (FAA)

Subject: FAA COA Request: Miami Beach Police Department, FL

Date: Wednesday, October 21, 2015 10:23:20 AM Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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 standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
 Management, sterile ground control station protocols, PIC and VO standard
 communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
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Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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----Original Message-----

From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, October 21, 2015 10:13 AM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Wednesday, October 21, 2015 8:55 AM

To: Reyes-Garcia, Dina (FAA)

Subject: RE: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

- 1. Miami Beach Police Department
- 2. Lockheed Martin Indago LE Quad Copter
- 3. Concept of Operation is as follows:
- Accident reconstruction
- Tactical/SWAT operations
- •Intelligence & evidence gathering
- Search & Rescue (SAR)
- Emergency & disaster response

If any further information is needed please advise. Thank you for your time.

Andre Morales, Technology Coordinator Investigations & Support Division / Information Resource Office MIAMI BEACH POLICE

DEPARTMENT

1100 Washington Ave, Miami Beach, FL 33139

(b) (6), (b) (7)(C)

----Original Message-----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Tuesday, October 20, 2015 11:48 AM

To: (b) (6), (b) (7)(C)

Subject: RE: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reves-garcia@faa.gov.

Once you provide this information, you will be assigned to a Specialist who will assist you with the COA process and required documentation.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Wednesday, October 14, 2015 8:41 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/faq/

Message:
-----Good morning,

I am (b) (6), (b) (7)(C) from the Miami Beach Police Department and am currently in the process of implementing a UAV program. We have identified a UAV that we will be purchasing in the near future and need to apply for a COA. I am requesting a username and password in order to begin the COA application process. Thank you for your time.

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Reyes-Garcia, Dina (FAA)

Subject: FAA COA request: Newton County Sheriff's Office, GA

Date: Friday, October 09, 2015 11:35:30 AM
Attachments: Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx Aircraft Registration.docx

image001.png

Good Afternoon,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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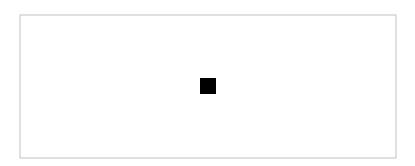
From: Reyes-Garcia, Dina (FAA)

Sent: Friday, October 09, 2015 10:42 AM

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA)
Subject: FW: COA

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Thursday, October 08, 2015 7:45 PM

To: Reyes-Garcia, Dina (FAA)

Subject: COA

Is this what is needed?

From:
To:
Co:
Reysus-Garda, Dina (FAA):
FAA COA request: SL Johns County Sheriff's Office, FL
Friday, October 09, 2015 11:31:59 M
Attachments:
Public Declaration Letter Guidance doc
Order 8900 1 Volume 16 docx
Arroff Registration docx

Good Afternoon.

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (AS) and (AS) and (AS) are a first and Law Enforcement (LEA) Fire, and First Responder Agency UAS Interested in interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (AS) and (AS) are a first responder Agency UAS Interested in interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (AS) and (AS) are a first responder to operate within the National Airspace System (NAS). Along with, (AS) and (AS) are a first responder to operate within the National Airspace System (NAS). Along with, (AS) and (AS) are a first responder to operate within the National Airspace System (NAS). Along with (NAS) are a first responder to operate within the National Airspace System (NAS) and (AS) are a first responder to operate within the National Airspace System (NAS). Along with (NAS) are a first responder to operate within the NATIONAL AIR and (AS) are a first responder to operate within the NATIONAL AIR and (AS) are a first responder to operate within the NATIONAL AIR and (AS) are a first responder to operate within the NATIONAL AIR and (AS) are a first responder to operate within the NATIONAL AIR and (AS) are a first responder to operate within the NATIONAL AIR and (AS) are a first responder to operate within the NATIONAL AIR and (AS) are a first responder to operate within the NATIONAL AIR and (AS) are a first responder to opera

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----Original Message-From: Reyes-Garcia, Dina (FAA) Sent: Friday, October 09, 2015 10:42 AM To (b) (6). (b) (7)(C)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C) Sent: Thursday, October 08, 2015 6:54 PM

To: Reyes-Garcia, Dina (FAA) Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Good Evening:

The St. Johns County Sheriff's Office in St. Augustine, Florida is looking at purchase two (2) DJI Matrice Quadcopter's (under 55lbs) for law enforcement use. We are looking at quick deployment at scenes for real time information, crime scene footage and to assist with looking for missing persons. I was looking for some guidance on the process for a law enforcement agency to be able to operate a UAS legally

Thank you for your time

(b) (6), (b) (7)(C) Career Criminal Task Force(SAO) (b) (6), (b) (7)

"If you're in trouble anywhere in the world, an airplane can drop you flowers; a helicopter can land and save your life." - Igor Sikorsky

CONFIDENTIAL - The information in this email is intended specifically for the person(s) to whom it is addressed and may contain confidential, exempt information from F.S.S. 119 (Florida Public Records Law), and/or otherwise privileged material. Unauthorized disclosure of confidential information contained herein is prohibited by Federal Regulations (42 CFR Section 481.101), HIPAA, Sarbanes-Oxley and State law. If you are not the intended recipient of this message or a person responsible for delivering it to the addressee, you are hereby notified that you must not disseminate, copy, use, distribute, publish or take any action in connection therewith. Unauthorized disclosure of confidential information is subject to prosecution and may result in a fine or imprisonment. If you have received this communication in error, do not distribute it. Please notify the sender immediately by electronic mail and delete this message.

----Original Message

From: 9-AJV-115-UASCOA@faa.gov [mailto 9-AJV-115-UASCOA@faa.gov] Sent: Thursday, October 08, 2015 5:20 PM

To (b) (6), (b)

e from www.faa.gov: 9-AJR-36-UAS@faa.gov

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reyes-garcia@faa gov.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Thursday, October 08, 2015 4:48 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

b0MFuMhLqZTmW9JJmU&s=xWUFxM9aMZ8ZDfwUeAlL1MFKez_5h8dQVRwVdITCuok&e=

Message: Good Afternoon:

Looking for information or a checklist for the St. Johns County Sheriff's Office to start the process to apply for an exemption and or a COA to operate a UAS for law enforcement purposes.

Thanks,

(b) (6), (b) (7)(C)

St. Johns County Sheriff's Office

 From:
 Rigol, Henry (FAA)

 To:
 (b) (6), (b) (7)

 Cc:
 Rigol, Henry (FAA); (b) (6)

Subject: FAA COA Request: City of Yonkers,NY
Date: Tuesday, October 27, 2015 9:59:55 PM
Attachments: Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx Aircraft Registration.docx

image001.png

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Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, October 27, 2015 6:59 PM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)

Subject: RE: City of Yonkers COA

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Sent: Tuesday, October 27, 2015 4:15 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** City of Yonkers COA

The City of Yonkers Police Department located in New York State is seeking an FAA COA for the use of a DJI Inspire Quadcopter equipped with camera and GPS. Some of the instances this UAS would be deployed would be in missing person searches, public demonstrations/ large events, hostage negotiations and officer safety situations.

This UAS would offer the operator/ police a wider scope of view in search areas and large public gatherings. It would also offer safety to responding officers at many incidents including but not limited to hostage negotiations.

(b) (6), (b) (7)(C)

Yonkers Police Department

Detective Division Tech Unit 104 South Broadway Yonkers, New York 10701 (b) (6), (b) (7)(C) From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA): (b) (6)
Subject: FAA COA Request: Columbus Police SWAT
Date: Tuesday, October 27, 2015 9:56:46 PM

Public Declaration Letter Guidance.doc Order 8900 1 Volume 16.docx Aircraft Registration.docx

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Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Tuesday, October 27, 2015 4:56 PM

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, October 27, 2015 1:52 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/fag/

Message:

Columbus Police SWAT team looking into purchasing a UAV (Drone) for specific police mission.

- 1. Low level area search
- 2. Photo and mapping for scouting.
- 3. Locating dangerous suspects
- 4. Any low level police related mission.

Once the COA is granted, is the pilot required to have a current Pilot License for police operations?

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FAA COA request D"Iberville Police Department, MS

Date: Thursday, October 08, 2015 1:18:44 PM

Aircraft Registration.docx Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

image001.png

Good Afternoon,

Attachments:

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, October 07, 2015 10:43 AM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)
Subject: RE: COA
Importance: High

(b) (6), (b) (7)(C)

I apologize for the late response. I have been out on medical leave and am now catching up on emails.

d.

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Monday, October 05, 2015 4:45 PM

To: 'Dina.Reyes-Garcia@faa.gov'

Subject: FW: COA

Ms. Reyes-Garcia,

I'm not sure the below email was sent, as I am having issues with my email.

Thanks,



"The world is too dangerous to live in; not because of the people who do evil, but because of the people who sit and let it happen." (Albert Einstein)

From: (b) (6), (b)

Sent: Friday, October 02, 2015 10:35 AM

To: 'Dina.Reyes-Garcia@faa.gov'

Subject: COA

Good morning,

The City of D'Iberville Police Department is requesting a COA to operate the following UAV.

DJI Phantom 3 professional (Quad Copter)

The City of D'Iberville will utilize the UAV to support City operations and provide photographic and video documentation of on-going projects throughout the City. Additionally, the Police Department will utilize the UAV during special events to coordinate law enforcement response for traffic and pedestrian safety during large gatherings such as, Mardi Gras, Holiday Shopping, "Cruisin' the Coast, etc. In the rare event the UAV might be of use as an aerial observation platform for emergencies, we would deploy the UAV.

If you have any questions, please give me a call or email.

Warmest regards,

(b) (6), (b) (7)(C)

D'Iberville Police Department

(b) (6), (b) (7)(C)

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From: <u>Rigol, Henry (FAA)</u>
To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA); (b) (6) Rigol, Henry (FAA)

Subject: FAA COA Request: St. Johns County, FL

Date: Wednesday, October 14, 2015 9:01:42 AM

Attachments: Public Declaration Letter Guidance.doc

Aircraft Registration.docx Order 8900 1 Volume 16.docx

image001.png

Good Morning,

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From: (b) (6), (b) (7)(C)

Sent: Thursday, October 08, 2015 8:04 AM

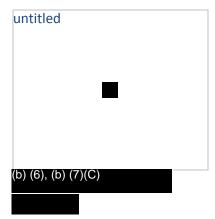
To: Corbett, Danielle (FAA)

Subject: UAS For law Enforcement

Good morning,

The St. Johns County Sheriff's Office is looking to implement a UAS program for use in the legally defined situations. Do you have any information, regulations or other items that would help us set this program up the correct way? If this is not your area can you direct me to some one who might have that information?

Thanks! Have a great day!



Bomb Squad Commander

(b) (6), (b) (7)(C)

Sheriff's Office Main (904) 824-8304

***IMPORTANT MESSAGE/CONFIDENTIAL NOTICE *** This message, including any attachments, is intended for the use of the person or entity to which it is addressed and may contain confidential information. If you received this communication in error, please return the original message to us at the above listed address via electronic mail. Any dissemination, distribution or coping of this information is **STRICTLY PROHIBITED**

From: (b) (6), (b) (7)(C)

To:

Cc: Rigol, Henry (FAA)

Subject: FAA COA request: The Bellevue Police Department"s ,OH

Date: Friday, October 09, 2015 12:10:49 PM Attachments: Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx Aircraft Registration.docx

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Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520

From: (b) (6), (b) (7)(C)

Sent: Friday, October 09, 2015 12:03 PM

To: Rigol, Henry (FAA)

Cc: (b) (6)

Subject: Information of starting UAS program for our Police Department.

I spoke with (b) (6), (b) (7) on the phone refence starting a UAS program at the Bellevue Police Department in Bellevue Ohio. He referred me to you to obtain some more information on what we would need to do to obtaining licensing and approval from the FAA for flight as well and any requirements for the operator of the UAS. The Bellevue Police Department's use of a UAS would be for searching for suspects who would run from law enforcement to escape capture and to help aid search and rescue missions where a citizen has gone missing. The department would also use the UAS for over watch on search warrant enforcement, crime scene reconstruction and evidence collection. The UAS could also be used where an officer feels the images recovered could help with the officer completing his/her task more efficiently and in a safer manner. Any information you can provide would be greatly appreciated.

(b) (6), (b) (7)(C)

Bellevue Police Department 3000 Seneca Industrial Parkway Bellevue, Ohio 44811

(b) (6), (b) (7)

From: Rigol Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Rigol Henry (FAA)

Subject: Faa COA Request: Town of Orangetown Police Department in Rockland County, NY

 Date:
 Friday, October 23, 2015 8:37:00 AM

 Attachments:
 Aircraft Registration.docx Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic

photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and
 that the it will be operated and maintained in strict compliance with the manufacturer's operational and
 maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual operational missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of
 the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

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----Original Message-----

From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, October 22, 2015 1:33 PM

To: (b) (6), (b) (7)(C) Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Wednesday, October 21, 2015 3:45 PM

To: Reyes-Garcia, Dina (FAA)

Subject: FW: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

In response to the questions below, I submit the following:

The public agency requesting a COA would be the Town of Orangetown Police Department, 26 Orangeburg Road Orangeburg, NY 10962

As far as a description of the UAS, we have not acquired one yet, since we wanted to see if we would be in compliance with FAA regs before making such an investment. What we have been looking into would be a relatively low to mid-range model equipped with HD camera, thermal imaging, if possible, and a relatively long flight time. We are only beginning to assess the technology at this time. Our options would be described by what, if any, authorizations we received.

Our concepts of operation would be to use the UAS for multiple purposes: Search and rescue for the numerous large wooded parks and portions of the Hudson River in our jurisdiction; searches for lost children, elderly and disabled in all areas; monitoring and assessing fires including brush fires in our mountainous and difficult-to-access park areas; analyzing and photographing crime scenes and motor vehicle accident scenes; assessing large crowds at annual parades, festivals and fairs; improving officer safety at barricaded-subject calls and planned enforcement operations.

Thank you for your attention.

(b) (6), (b) (7)(C)

Orangetown Police Department 26 Orangeburg Road Orangeburg, NY 10962

(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

From: 9-AJV-115-UASCOA@faa.gov [9-AJV-115-UASCOA@faa.gov]

Sent: Tuesday, October 20, 2015 7:20 PM

To: (b) (6), (b) (7)(C)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reyes-garcia@faa.gov.

Once you provide this information, you will be assigned to a Specialist who will assist you with the COA process and required documentation.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, October 20, 2015 2:43 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

I am considering attempting to start a UAS program for my employer, the Town of Orangetown Police Department in Rockland County, NY. I have read some of the relevant pages on the FAA website, and am wondering about the COA requirement that the UAS not be operated in a populated area. Our jurisdiction is a suburban area with some large public parks, interstate highways and commercial zones approximately 30 miles north of NYC. Would we be eligible to get a COA with these conditions? We are thinking of using the UAS for search and rescue, but also for other law enforcement applications. Can a COA be issued under these conditions? Does the area have to be totally rural and unpopulated?

From: Rigol, Henry (FAA)

To: (b) (6), (b)

Cc: Reyes-Garcia, Dina (FAA); (b) (6) Rigol, Henry (FAA)

Subject: FAA COA request: Williamson County Sherriff's Department, TN

Date: Friday, October 09, 2015 11:25:21 AM

Date: Friday, October 09, 2015 11:25:21 AM
Attachments: Public Declaration Letter Guidance.doc

Aircraft Registration.docx Order 8900 1 Volume 16.docx

image001.png

Good Afternoon,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
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Respectfully,

Henry Rigol

Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

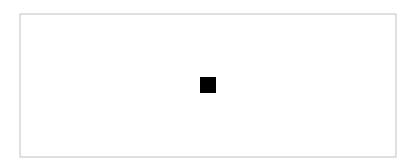
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From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, October 08, 2015 5:16 PM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)
Subject: RE: Public COA

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

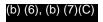
Sent: Thursday, October 08, 2015 4:49 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** RE: Public COA

Dina,

Thank you for the quick response. The information you have requested is below:

- (1) Williamson County Sherriff's Department(Williamson County Tennessee)
- (2) Attached
- (3) Attached



From: <u>Dina.Reyes-Garcia@faa.gov</u> [mailto:Dina.Reyes-Garcia@faa.gov]

Sent: Wednesday, October 07, 2015 9:46 AM

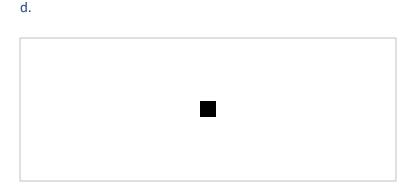
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(b) (6), (b) (7)(C)

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Please submit to dina.reves-garcia@faa.gov.

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From: (b) (6), (b) (7)(C)

Sent: Monday, October 05, 2015 4:55 PM

To: Reyes-Garcia, Dina (FAA)

Subject: Public COA

Ms. Reyes-Garcia,

I received your contact information from (b) (6) at the OE/AAA Help Desk. I am supporting a Sheriff's Department in Tennessee stand up an Unmanned Aircraft Unit, and I am interested in getting all of my ducks in a row before we begin the process. I understand the process generally speaking, but the initial requirement is to acquire a public use COA account. This is where I do not know how to proceed. I understand that the account must be held by the responsible individual at the Department, correct? And that in order to begin the process we must have a letter from the state or county attorney stating that we(the Sheriff's Department) are in fact a public entity, and intend to utilize an sUAS in a manner not related to commercial use(Profit). Once this letter has been received, the COA application can begin, correct? Any help that you can offer for us to complete this action would be much appreciated.



From: Rigol, Henry (FAA)
To: (b) (6)

Cc: Rigol, Henry (FAA)

Subject: Guidance for Public agencies that request access into the NAS

 Date:
 Thursday, October 08, 2015 1:32:04 PM

 Attachments:
 Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx Aircraft Registration.docx

Good Afternoon,

Mr. Finlay- the below guidance is for agencies that qualify for Public Status.

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (5) (6) and Air Traffic and Law Enforcement (15) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
 Management, sterile ground control station protocols, PIC and VO standard
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the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: Gardner, Scott (FAA)

Sent: Wednesday, October 07, 2015 7:31 AM

To: (b) (6), (b) (7)

Cc: (b) (6), (b) (7)(C) (b) (6), (b) (7)(C)); Rigol, Henry (FAA)

Subject: RE: COA for emergency drone flights in area of Newark NJ

(b) (6), (b) (7)

As you're aware Class B is the most congested airspace and requires certain equipage on any aircraft that fly in it, ie transponder, direct two-way communication with ATC, and the Hudson River has its own specific flight restrictions that need to be complied with. And night operations require specific lighting on the aircraft.

There is already an initiative with NYC first responders to fly UAS in the NYC area, so let me forward this to the folks working that issue as they may have more specific information. They are (6) (6) and Hank Rigol, cc'd on this e-mail.

Thank you. Scott

Scott Gardner Air Traffic Specialist, UAS Tactical Operations Section, AJV-115 FAA Headquarters 470 L'Enfant Plaza, Ste 7105

Washington, DC 20024 Ph: 202-267-8192

From: (b) (6)

Sent: Tuesday, October 06, 2015 5:34 PM

To: Gardner, Scott (FAA) **Cc:** Sweet, Scott CTR (FAA)

Subject: COA for emergency drone flights in area of Newark NJ

Scott,

You recall we last talked about a tethered balloon near DCA. That job was cancelled when they saw the price tag, but Paul Eure, who you put me in touch with, was very helpful.

Now we are discussing a plan to station small quads with crews inside emergency response units in Newark. We would need authorization to fly in NY Bravo, at night, and in closer proximity to crowds than the blanket sUAV COA permits. But I think the plan has potential to improve public safety overall by giving first responders quick close range aerial views.

Can you help us find the best person to discuss this with?

Our Sect 333 exemption is no. 11633.

Thanks.



FAA-approved to fly drones for commercial photography and data gathering.

From: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: COA Process

Date: Wednesday, October 21, 2015 11:32:00 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

image001.png

Commander Rider.

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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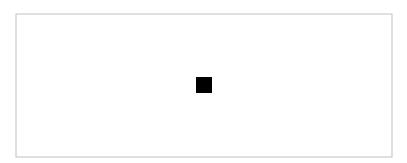
From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, Oct To: (b) (6), (b) (7)(C) October 20, 2015 12:39 PM

Cc: (b) (6)

Subject: RE: COA Process

, who will continue to assist you with Thank you. Your case has been assigned to (b) (6) the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Tuesday, October 20, 2015 2:50 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** COA Process

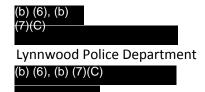
Good Morning,

I am (b) (6), (b) (7) with the Lynnwood Police Department in Washington State. I am also the SWAT Commander for North Sound Metro SWAT, which is a regional SWAT team comprised of nine agencies serving a population of approximately 250,000.

Our department is interested in purchasing a small UAV with live video and FLIR capability with the intent of using it during high risk operations to send a live operational feeds to incident and tactical command. Our intent would also be to use the UAV as a scouting tool for operational preparation, under the authority of a search warrant. Additional uses would include search and rescue missions and suspect searches in rural areas.

I would like to apply for a COA in order to lawfully operate a UAV for these purposes. Any assistance you can provide would be appreciated.

Thank You,



From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Clark County Sheriff"s Office WA

Date: Monday, November 09, 2015 12:44:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

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Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Monday, November 09, 2015 8:51 AM

 $T_{O:}$ (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Wednesday, November 04, 2015 7:11 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/faq/

Message:

Good Afternoon,

I am trying to get started and obtain an account so that our agency can obtain a COA to operate a drone for SAR operations documenting crime scenes. I have found that I need to obtain an account so that I can submit the online COA request. I can't find where I go to sign up for the account. Could you point me in a direction to get this process started?

(b) (6), (b) (7)(C)

Clark County Sheriff's Office 707 W 13th Street Vancouver, WA 98666

(b) (6), (b) (7)(C)

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA): (b)

Cc: Rigol, Henry (FAA); (6)
Subject: FAA COA request: Career Criminal Unit, SC
Date: Thursday, November 12, 2015 11:18:52 AM

Attachments: Order 8900 1 Volume 16.docx

Aircraft Registration.docx

Public Declaration Letter Guidance.doc

image001.png

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Respectfully,

Henry Rigol

Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: (b) (6), (b) (7)(C)

Sent: Thursday, November 12, 2015 11:16 AM

To: Rigol, Henry (FAA)

Subject: Drone Registration and Licensing

Henry,

My office recently purchased a Yuneec Q500 drone for law enforcement use on crime scene recreation, surveillance, and other LE purposes. I wanted to touch base with you all to make sure I am legal when I fly the drone. My agency is a government agency (District Attorney's Office) and we would like to mirror the FAA license similar to what the Allendale Police Department recently did. Please let me know what all you need from me to get this accomplished.

Thank you,

(b) (6), (b) (7)(C)

Career Criminal Unit Fourteenth Circuit Solicitor's Office PO Box 1880 Bluffton, SC 29910

(b) (6), (b) (7)(C)





CONFIDENTIALITY NOTICE: This transmission may contain identifying information that is protected from disclosure by applicable federal and/or state law. This communication is intended for the use of the individual or entity named above. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copy of this communication is strictly prohibited and may subject the violator to civil and/or criminal penalties. If you have received this communication in error, please notify us immediately by telephone or by replying to this e-mail and destroying all copies of this message and all attachments.

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA); Rigol, Henry (FAA)

Subject: FAA COA request: Dakota County Sheriff's Office, MN

Date: Tuesday, November 03, 2015 10:31:58 AM

Attachments: <u>Aircraft Registration.docx</u>

Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx

image001.png

Good Morning,

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, November 03, 2015 10:27 AM

To: (b) (6), (b) (7) Cc: Rigol, Henry (FAA)

Subject: RE: UAS COA User name and password into the system

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Monday, November 02, 2015 9:55 AM

To: Reyes-Garcia, Dina (FAA)
Cc: (b) (6), (b) (7)(C)

Subject: UAS COA User name and password into the system

Hi Dina,

I have been trying to set up a user name and password in the COA system and was sent the below info....

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reyes-garcia@faa.gov.

Once you provide this information, you will be assigned to a Specialist who will assist you with the COA process and required documentation.

Here is the information requested.

- 1. Public agency requesting the COA Dakota County Sheriff's Office (Minnesota)
- 2. Small description of the UAS Our UAS will be a small 4 rotor-blade UAS with front and/or bottom view camera flying at a ceiling of approximately 400 feet with a flying radius of approximately ½ mile with auto home features capable of flying for up to 45 minutes at a time.
- 3. Concept of operation We plan to fly the UAS for Missing Persons, Search and Rescue operations, Disaster Damage Assessment, Flood Impact Assessment, Fire Scene Support, Erosion Monitoring, Water Operations, Training Documentation, Crime Scene Documentation and SWAT Team Support if needed.

Thank you for your help with the COA process.

(b) (6), (b) (7)(C)

Dakota County Sheriff's Office
(b) (6), (b) (7)(C)

1580 Highway 55 Hastings, MN 55033

(b) (6), (b) (7)(C)

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA);

Subject: FAA COA Request: Pinellas County Sheriff's Office, Florida

Date: Friday, November 13, 2015 10:22:06 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

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From: (b) (6), (b) (7)(C)

Sent: Friday, November 13, 2015 10:18 AM

To: Rigol, Henry (FAA)

Subject: UAS

Good morning Sir.

I was given your info from Miami-Dade Police Department regarding the UAS/FAA requirements. I work for the Pinellas County Sheriff's Office in Florida. Our Sheriff has us looking into the use of the UAS. We plan on using the UAS for our SWAT operations, major traffic crash investigation etc. What I'm looking for now, is what is the process of staring this up, how long does it take and roughly what does it cost for the COA etc.

I'm sure I will have a lot more questions in the near future but this is a start.

Thank you

(b) (6), (b) (7)(C)

Pinellas County Sheriff's Office Narcotics Division HIDTA

(b) (6), (b) (7)(C)

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); (b) (6)

Subject: FAA COA request: Raytown, MO Police Department

Date: Thursday, October 29, 2015 2:01:03 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png

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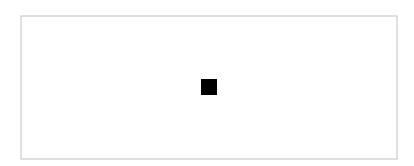
From: 9-AJV-115-UASCOA (FAA)

Sent: Thursday, October 29, 2015 1:54 PM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)

Subject: RE: Public Aircraft COA

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Tuesday, October 27, 2015 6:30 PM

To: 9-AJV-115-UASCOA (FAA) **Subject:** Public Aircraft COA

Sir or Ma'am,

Our agency is researching the use of sUAS for law enforcement purposes. The website https://www.faa.gov/uas/public_operations/ said to email this address to begin the process. I am familiar with the declaration letter that needs to be provided to the FAA and have started the process to complete it.

I am looking for guidance in the process. I look forward to hearing from you.

Respectfully,

(b) (6), (b) (7)(C)

Investigations Unit
Raytown, MO Police Department

(b) (6), (b) (7)(C)

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)

Cc: Rigol, Henry (FAA); (b) (6)

Subject: FAA COA request: Washington County Sheriff"s Office, MN.

Date: Friday, October 30, 2015 10:16:31 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable
 executive acknowledging that the Proponent accepts all responsibility for ensuring
 that the UAS is airworthy and that the it will be operated and maintained in strict
 compliance with the manufacturer's operational and maintenance
 recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual operational missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
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 Operating Procedures (SOPs) for each phase of flight operation from notification
 for deployment through preflight, launch, recovery, post-flight and mission record
 keeping. SOPs must include, at a minimum, emergency procedures and
 standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
 Management, sterile ground control station protocols, PIC and VO standard
 communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: (b) (6), (b) (7)(C)

Sent: Thursday, October 29, 2015 3:28 PM

To: Rigol, Henry (FAA)

Subject: RE: FAA COA request: Washington County Sheriff's Office, MN.

We have not received as of yet. I did speak with the help desk today who provided me with some direction as well.

Thank you,

(b) (6), (b) (7)(C)

Washington County Sheriff's Office Parks Division 15015 62nd Street North Stillwater, MN

(b) (6), (b) (7)(C)

From: Henry.Rigol@faa.gov [mailto:Henry.Rigol@faa.gov]

Sent: Thursday, October 29, 2015 2:25 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6) ; Dina.Reyes-Garcia@faa.gov; Henry.Rigol@faa.gov

Subject: FAA COA request: Washington County Sheriff's Office, MN.

Sir,

I apologize for the late response – Has your office received our introduction letter?

Respectfully,

Henry Rigol

Air Traffic Specialist, UAS Tactical Operations

Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FAA COA request:

Date: Wednesday, November 04, 2015 10:24:28 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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----Original Message----

From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, November 04, 2015 9:32 AM

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with your questions. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, November 03, 2015 10:45 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: Questions relating to <a href="ww

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/fag/

Message:

My Department is inquiring what if any authorization is needed to operate a quad copter drone for the purpose of investigating fatality accident scenes/crime scene?

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Reyes-Garcia, Dina (FAA); Rigol, Henry (FAA); (b) (6) Steventon, John (FAA)

Subject: FAA COA request: Northern Regional Police Dept, Wexford, Pa

Date: Monday, November 02, 2015 8:02:40 AM
Attachments: Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx Aircraft Registration.docx

image001.png image002.jpg

Good Morning,

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Respectfully,

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Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Friday, October 30, 2015 2:02 PM

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA)

Subject: RE: UAS registration

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Friday, October 30, 2015 11:38 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** UAS registration

Dina,

My name is (b) (6), (b) (7)(C) with the Northern Regional Police Department located in Wexford, Pa. We recently purchased a UAS and would like to request a COA. The UAS we acquired is a DJI PV3 Professional Drone purchased through Security Consulting Solutions, Inc. Our drone is small in size weighing 1280 grams and flown with 4 propellers. It is piloted by trained officers who utilize a smartphone based remote control. We would be utilizing the UAS for any search and rescue operation necessary within our jurisdiction. If you have any other questions please feel free to let me know.

Thank you,

(b) (6), (b) (7)(C)

Northern Regional Police Dept. 230 Pearce Mill Rd 15090 (b) (6). (b) (7)(C)

(b) (6), (b) (7)(C) srt

From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Operating an Unmanned Aircraft System in the National Airspace

Date: Wednesday, November 18, 2015 10:41:00 AM

Attachments: Aircraft Registration.docx

COA Online Access Request Form.pdf Order 8900 1 Volume 16.docx

Public Declaration Letter - Louisiana State Fire Dept..pdf

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

I was provided a copy of a public declaration letter from the Assistant Attorney General's office from the State of Louisiana declaring your agency as a political subdivision of the State for the purpose of operating a UAS. The document was reviewed by the FAA's legal office and I have been informed that the documentation meets the FAA's criteria so that you may operate as a Public Aircraft Operator. I have attached the COA on-line access request form. Please complete this form and return to me so that I can forward it to the FAA COA on-Line Coordinator who will provide you with COA access and temporary password.

Also, since I do not have any previous correspondence explaining the UAS public aircraft program I have attached the typical information I provide to agencies wishing to operate a small UAS in the NAS.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology

supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual operational missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office that you have completed and the registration of the unmanned aircraft system

with the FAA. The FAA cannot move forward beyond review of the COA application until the proponent has, at a minimum, filed for registration of the FAA.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Hank Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA); Rigol, Henry (FAA)

Subject: Paris TX Police Department Operating a small unmanned Aircraft in the National Airspace System

Date: Tuesday, November 03, 2015 1:25:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

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When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
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 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
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 to mitigate any attendant hazard for UAS)
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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State

Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

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From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Date: Wednesday, November 18, 2015 3:22:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (6) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: 9-AFS-UAS-Inquiries (FAA)

Sent: Wednesday, November 18, 2015 10:42 AM

 $T_{0:}$ (b) (6)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Further information can be found on our website: http://www.faa.gov/uas.

Regards,

(b) (6)

FAA UAS Integration Office www.faa.gov/uas

From: (b) (6), (b) (7)(C)

Sent: Friday, September 04, 2015 7:18 PM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:
-----Hello,

I work for the Colorado Department of Corrections. Our search/tracking team is currently researching the possibility of utilizing UAV technology for our mission. I have been unable to find any information of utilizing a UAV, I.E. is it required to have a pilots license or any sort of certificate of usage? Any information you could provide would be greatly appreciated.

Thank you,

(b) (6), (b) (7)(C)

From:

To: (b) (6), (b) (7)(C) Cc: Rigol, Henry (FAA); Steventon, John (FAA)

RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov Subject:

Date: Friday, October 30, 2015 1:47:00 PM Attachments:

Aircraft Registration.docx Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Thursday, October 29, 2015 10:48 AM

 $T_{O:}$ (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Steve Pansky, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to learn more on COAs and the COA process.

-----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, October 27, 2015 2:03 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

Hello,

I have been tasked with developing a UAS program for the Huntington Beach Police Dept. in California. The program would be used for tactical situations to make observations in instances where otherwise officers would be in vulnerable positions. Please let me know what I need to do to obtain a COA to operate within regulations. Thank you,

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: COA Account, Arapahoe County Sheriff's Office, Centennial, CO

Date: Wednesday, November 18, 2015 9:39:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

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The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology

supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Rigol, Henry (FAA)

Sent: Tuesday, November 17, 2015 9:50 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: FW: COA Account, Arapahoe County Sheriff's Office, Centennial, CO

Sir,

I'm sorry; (b) (6) will be assisting you in the COA process. He has been CC in the

Email

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: (b) (6), (b) (7)(C)

Sent: Monday, November 16, 2015 3:09 PM

To: Rigol, Henry (FAA) Subject: COA Account

Mr. Rigol,

Just inquiring as to the position of our COA account request. I received an email from Ms. Reyes-Garcia that you would be handling our request.

(b) (6), (b) (7)(C)

Arapahoe County Sheriff's Office
Office of Emergency Management
13101 E. Broncos Parkway
Centennial, CO 80112

(b) (6), (b) (7)

From: (b) (6)
To: (b) (6), (b) (7)(C)

 Cc:
 Rigol, Henry (FAA); Steventon, John (FAA)

 Subject:
 RE: Nevada Highway Patrol UAV program

 Date:
 Wednesday, November 18, 2015 9:40:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

Sorry for the delay in getting back to you. When I come to DC I get pulled in several directions. As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, November 17, 2015 10:04 AM

To: (b) (6)

Subject: Nevada Highway Patrol UAV program

(b) (6)

Thank you for taking my call between meetings today. Please send me the information you mentioned. Hopefully we could schedule a time to discuss the requirements once I review the information.

Thank you,

(b) (6), (b) (7)(C)

Department of Public Safety, Nevada Highway Patrol Multidisciplinary Investigation & Reconstruction Team (MIRT) 4615 W. Sunset Road, Las Vegas, NV 89118

(b) (6), (b) (7)(C)

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Public Use COA

Date: Saturday, October 31, 2015 9:25:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png image002.png

(b) (6), (b) (7)

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 An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

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The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: Reyes-Garcia, Dina (FAA)

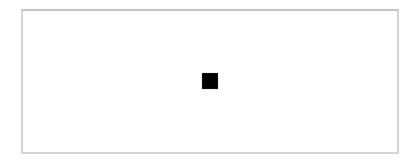
Sent: Friday, October 30, 2015 10:55 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Public Use COA

Thank you. Your case has been assigned to (6) (6) who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Thursday, October 29, 2015 2:32 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** Public Use COA

Ma'am

Here is the information that was requested

- 1- Pima County Sheriff's Department is the agency requesting the COA
- 2- The platform we intend to use is a foam fixed wing model aircraft (Ranger 757-4). This aircraft will be outfitted with several cameras and be controlled by a ground station. The aircraft will be well under 55 lbs
- 3- This UAS will be used exclusively for Search and Rescue operations in Pima County. There is a potential to operate the UAS in other AZ counties if our assistance is requested. It will be used primarily in remote areas and will fly under 400' AGL. We intend to use is for day and night operations. We intend on outfitting the aircraft with lights for better nighttime visibility. The UAS will be operated by trained volunteers via a ground station

Please let me know if you need any further information

(b) (6), (b) (7)(C)

Pima County Sheriff's Department Search and Rescue Unit 1750 E. Benson Hwy Tucson, AZ 85714 Office: (520) 351-6126 General number (520) 351-4900



Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reyes-garcia@faa.gov.

Once you provide this information, you will be assigned to a Specialist who will assist you with the COA process and required documentation.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Thursday, October 29, 2015 12:04 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

I am a Deputy with the Pima County Sheriff's Department. We are looking to get a public use COA for operating a UAS in the state of Arizona.

From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Maibach, Joseph (FAA); Rigol, Henry (FAA); Steventon, John (FAA); (b) (6), (b) (7)(C)

Subject: RE: Texas Department of Public Safety

Date: Thursday, October 29, 2015 1:14:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

If you were not aware, we have approved UAs operations with the Texas Department of Public Safety many years ago when they were operating AeroVironment Products. You may want to speak with Trooper (b) (6), with the aviation Unit in Austin who we worked closely with. The information below outlines the current UAS program that we are implementing for public safety agencies across the country.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. I have reviewed the letter from the state attorney general's office and unfortunately today, this letter would not be sufficient since it does not call out that your agency could operate under title 49 USC 40102A(41)(C) since you are a political subdivision of the State of Texas and that you would not operate the UAS as a commercial operator referencing Title 49 USC 40125B. If you could get the attorney general's office to add these two references then the letter would be sufficient.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a ..."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency

procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures

- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Maibach, Joseph (FAA)

Sent: Tuesday, October 27, 2015 3:42 AM

To: Rigol, Henry (FAA); (b) (6)

Subject: FW: Texas Department of Public Safety

Good morning. This sounds like something you all handle, no? I haven't replied to his email yet. Please let me know if/when you reach out to him.

Joseph Maibach
Air Traffic Control Specialist
UAS Tactical Operations Section, AJV-115
470 L'Enfant Plaza, SW, Suite 7105
Washington, DC 20024

Phone: 202-267-9060 joseph.maibach@faa.gov

From: (b) (6), (b) (7)(C)

Sent: Friday, October 23, 2015 11:51 AM

To: Maibach, Joseph (FAA)

Cc: Reyes-Garcia, Dina (FAA); (b) (6)
Subject: RE: Texas Department of Public Safety

Greetings,

Thank you for responding to my email. Below are my responses to the requested questions from your prior email:

- (1) public agency requesting the COA: The requesting agency is the Texas Department of Public Safety and I have attached the requested declaration letter for your review. My contact information is listed below by the signature line of this email. Feel free to give me a call if you have any questions.
- (2) small description of the UAS: We plan on implementing a UAS with the specifications identified in the attached document, UAS(Dji_specs).
- (3) concept of operation: The concept of operation is to have the capabilities to deploy micro UAS's in support of critical incidents, exigent circumstances and the execution of authorized search warrants in situations where our department's air assets are unavailable to respond. DPS would adhere to all FAA rules and protocols outlined in the NPRM Summary of Small UAS or other FAA rule making documents. Examples of situations where the UAS's will be deployed would be:
 - a. Hostage or Barricaded subject Events obtain aerial depiction of the hostage/barricade environment to identify and address safety concerns and assist with appropriate allocation of resources to preserve human life,
 - b. Active Shooter Emergencies obtain aerial depiction of the active shooter emergencies to identify and address safety concerns and assist with appropriate allocation of resources to preserve human life,
 - c. Search Warrants deploy the UAS when carrying and executing felony search warrants for officer safety purposes in tandem with providing aerial surveillance of the search warrant operation.
 - d. Search & Rescue Operations deploy the UAS to provide aerial footage of the landscape in an attempt to locate/rescue a missing or lost persons

- e. After a Natural Disaster deploying the UAS in advance of ground personnel entering an area to identify and address safety concerns and assist with appropriate allocation of resources to preserve property and human life,
- f. After Man-made Disaster: deploying the UAS in advance of ground personnel entering the disaster area to identify safety concerns and assist with appropriate allocation of resources to preserve property and human life,
- g. Surveying a Crime Scene or a Major Traffic Accident Scene deploying UAS to obtain video evidence of a crime scene, OR
- h. Other Exigent Situations emergencies which require immediate deployment in order to preserve human life.

(b) (6), (b) (7)(C)

Texas Department of Public Safety **Criminal Investigations Division Investigative Support Section** 6100 Guadalupe, Bldg. E Austin, Texas 78752

(b) (6), (b) (7) (C)

This communication may be confidential and/or privileged pursuant to relevant law, including Government Code Sections 552.352, 552.101 and 552.111 and should not be disclosed without the express authorization of the Texas Department of Public Safety. If you have received this message in error, do not disseminate, distribute, use, or copy this communication if you are not an intended recipient. Please CONTACT the sender by reply email and DESTROY all copies of the original.

From: Joseph.Maibach@faa.gov [mailto:Joseph.Maibach@faa.gov]

Sent: Wednesday, October 21, 2015 7:53 AM

To: (b) (6), (b) (7)(C)

Cc: Dina.Reyes-Garcia@faa.gov

Subject: Texas Department of Public Safety

(b) (6), (b) (7)(C)

Good morning. I was forwarded this email yesterday afternoon. Can you please email me your contact information, along with the public declaration letter you mentioned?

Thank you,

Joe

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Thursday, October 15, 2015 11:49 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been

contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

	M	essa	ge	
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My agency has previously submitted a letter certifying that the Texas Department of Public Safety is state agency of the State of Texas. The letter was drafted by the Attorney General of Texas, General Counsel Katherine Cary, on October 16, 2013. Please provide a mechanism by which I may attach the letter so that I may be assigned a user profile to initiate submitting a Certificate of Authorization to operate an Unmanned Aircraft Vehicle (UAV).

Joseph Maibach
Air Traffic Control Specialist
UAS Tactical Operations Section, AJV-115
470 L'Enfant Plaza, SW, Suite 7105
Washington, DC 20024
Phone: 202-267-9060

Phone: 202-267-9060 joseph.maibach@faa.gov

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Reyes-Garcia, Dina (FAA); Rigol, Henry (FAA); (b) (6) Steventon, John (FAA)

Subject: FAA COA Request: Bertie County Sheriff's Office, Windsor, NC

Date: Monday, December 07, 2015 4:00:52 PM

Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

Aircraft Registration.docx

image001.png

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and

establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable
 executive acknowledging that the Proponent accepts all responsibility for ensuring
 that the UAS is airworthy and that the it will be operated and maintained in strict
 compliance with the manufacturer's operational and maintenance
 recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that
 will be executed at the site in the event of an emergency (this could include
 execution of procedures outlined in the manufacturers supplied operator's flight
 manual, other possible alternative courses of action available for each phase of
 flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels

confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual operational missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard
 Operating Procedures (SOPs) for each phase of flight operation from notification
 for deployment through preflight, launch, recovery, post-flight and mission record
 keeping. SOPs must include, at a minimum, emergency procedures and
 standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
 Management, sterile ground control station protocols, PIC and VO standard
 communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically
 identifies the boundaries of the agency's jurisdiction, and all unique operational
 areas within that jurisdiction and their attendant hazards (Note: The SRAP must
 include a description of specific risk controls the agency's will employ to mitigate
 any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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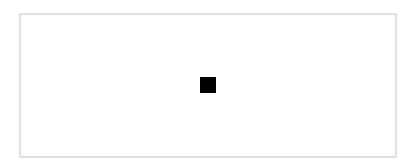
From: Reyes-Garcia, Dina (FAA)

Sent: Monday, December 07, 2015 11:26 AM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)

Subject: RE: Reference Purchase of Drone

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Monday, December 07, 2015 9:56 AM

To: Reyes-Garcia, Dina (FAA)

Subject: Reference Purchase of Drone

Good morning, the Bertie County Sheriffs Office is in the process of purchasing a drone for law enforcement use. I was told that you are in charge of the initial process to get approval. The Drone will belong to the following:

Bertie County Sheriff's Office

(b) (6), (b) (7)(C)

104 Dundee Street PO Box 157 Windsor, NC 27983

It is a small battery powered Quad copter.

The UAS will be operated VFR, below 500ft AGL. The UAS will be used for search and rescue, surveillance, searching for suspects and event security. The crafter will be operated in the county of Bertie.

Thank you so much for your assistance.

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Reyes-Garcia, Dina (FAA); (b) (6); Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FAA COA Request: Bollinger County Sheriff's Office, MO

Date: Wednesday, December 16, 2015 7:25:26 AM

Attachments: <u>Aircraft Registration.docx</u>

Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx

image001.png image002.jpg

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (5) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, December 15, 2015 9:34 PM

To: (b) (6), (b)

Cc: Rigol, Henry (FAA)

Subject: RE: Public COA for UAS

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Tuesday, December 15, 2015 9:38 AM

To: Reyes-Garcia, Dina (FAA) Subject: Re: Public COA for UAS

(b) (6), (b) (7)(C)

Bollinger County Sheriffs Office 202 High St, Marble Hill, MO 63764 (573) 238-2633

I have 2 self built UAS One 4 rotor 450 mm class 1500 grams One 4 rotor 550 mm class 1900 grams

Operation surveillance and search and rescue.

On Dec 15, 2015 8:26 AM, '(b) (6) wrote: Thank you for contacting the OE/AAA Support Desk regarding the completion of a Public (governmental/educational) COA.

<u>Dina.Reyes-Garcia@faa.gov</u> is the on-line COA administrator and will provide you with the necessary credentials needed for the system access. Please e-mail her the following for her to provide you with a COA username:

- 1. The name of the public entity
- Small description of the UAS
- 3. The concept of the operation (a paragraph will suffice)

Please familiarize yourself with http://www.faa.gov/uas/public_operations/ while waiting for your login credentials.

Should you have additional questions please do not hesitate to contact us. Have a great day!



Providing
"Satisfaction through Quality"
... with every solution.

This electronic mail message and any attached files contain information intended for the exclusive use of the individual or entity to whom it is addressed and may contain information that is proprietary, privileged, confidential and/or exempt from disclosure under applicable law. If you are not the intended recipient, you are hereby notified that any viewing, copying, disclosure or distribution of this information may be subject to legal restriction or sanction. Please notify the sender, by electronic mail or telephone, of any unintended recipients and delete the original message without making any copies.

Go Green! Print this email only when necessary. Thank you for helping CGH be environmentally responsible.

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)

Cc: Reyes-Garcia, Dina (FAA); (b) (6) Rigol, Henry (FAA)

Subject: FAA COA Request: Bucks County District Attorney's Office, PA

Date: Monday, December 14, 2015 6:43:38 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png image002.png

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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From: Reyes-Garcia, Dina (FAA)

Sent: Friday, December 11, 2015 11:51 PM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)

Subject: RE: UAS Information

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Sent: Friday, December 11, 2015 11:33 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** UAS Information

Ms. Reyes-Garcia,

I am a (b) (6), (b) (7)(C) for the Bucks County District Attorney's Office in Pennsylvania (Philadelphia area). Our police agency is currently in the early stages of establishing a program to deploy a UAS for emergency situations (police, rescue and hazardous materials).

Your email address was provided to me during our research on obtaining a COA (Info provided by:

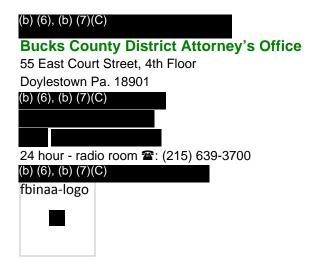
(b) (6)

). Prior to proceeding any further in our
program, we are trying to ascertain exactly what the FAA requirements are / will be for an operator
/ pilot (PIC) on a Law Enforcement UAS weighing under 5 pounds. To date, no one has been able to

clarify the issue.

If possible, could you forward me the contact information on anyone who would be able answer the question or point us in the right direction.

Thank you.



Please note that my email address has changed to will receive emails to (b) (6), (b) (7)(C) I for a limited time only. Thank you.

Please Be Advised

The County of Bucks has changed our email domain from co.bucks.pa.us to BucksCounty.org.

In order to continue sending emails to

our personnel, please adjust all of your county contacts to our new @buckscounty.org domain. Thank you.

The information in this email is confidential and may be legally privileged and protected under State and/or Federal Laws. It is

intended solely for the addressee. Access to this email by anyone else is unauthorized. If you are not the intended recipient, any

disclosure, copying, distribution or any action taken or omitted to be taken in reliance on it, is prohibited and may be unlawful.

If you believe that you have received this email in error, please contact the sender or call 215-348-6000.

From: Rigol, Henry (FAA)

To: (b) (6),

Cc: Reves-Garcia, Dina (FAA); (6) Steventon, John (FAA); Rigol, Henry (FAA)

Subject: FAA COA Request: Dodge County Sheriff's Office, WI Date: Wednesday, December 16, 2015 7:23:00 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png image002.png image003.jpg

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Section AJV-115
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henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, December 15, 2015 9:43 PM

To: (b) (6)
Cc: Rigol, Henry (FAA)
Subject: RE: Public COA

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Monday, December 14, 2015 4:01 PM

To: Reyes-Garcia, Dina (FAA) Subject: FW: Public COA

This is (b) (6), (b) (7)(C) of the Dodge County Sheriff's Office in Wisconsin. We are in the process of purchasing an unmanned aerial vehicle and I would like to being the COA process.

Below is the information I was told you need to start the process and to give me credentials for system access.

Name of public entity: Dodge County Sheriff's Office

Description of the UAS: Planning on buying the DJI Phantom 3 Advanced

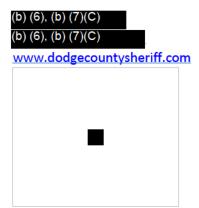
Concept of Operation: To be used by Dodge County Sheriff's Office personnel in accordance within state and federal laws for law enforcement purposes. These may include but not limited to, search and rescue, vehicle crash investigations, evidence retrieval, tactical situations, public outreach, investigations, scene documentation, etc. All employees who operate the UAS will have training on, operation, policy and procedures and local, state and federal laws.

Thank you in advance.

(b) (6), (b) (7)(C)

Dodge County Sheriff's Office 124 West St. Juneau, WI 53039

(b) (6), (b) (7)(C)



From: (b) (6), (b) (7)(C)

Sent: Monday, December 14, 2015 2:48 PM

To: (b) (6), (b)
Subject: Public COA

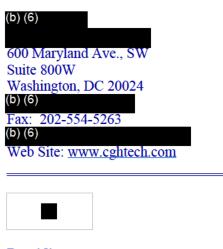
Thank you for contacting the OE/AAA Support Desk regarding the completion of a Public (governmental/educational) COA.

<u>Dina.Reyes-Garcia@faa.gov</u> is the on-line COA administrator and will provide you with the necessary credentials needed for the system access. Please e-mail her the following for her to provide you with a COA username:

- 1. The name of the public entity
- 2. Small description of the UAS
- 3. The concept of the operation (a paragraph will suffice)

Please familiarize yourself with http://www.faa.gov/uas/public_operations/ while waiting for your login credentials.

Should you have additional questions please do not hesitate to contact us. Have a great day!



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...with every solution.

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Go Green! Print this email only when necessary. Thank you for helping CGH be environmentally responsible.

This email and any files transmitted with it are private and may contain privileged information intended solely for the use of the individual(s) or entity(s) to whom they are addressed. If you have received this communication in

error, please notify Dodge County by emailing dhelp@co.dodge.wi.us. If you are not the named addressee you should not disseminate, distribute or copy this e-mail.

Dodge County accepts no liability or responsibility for any onward transmission

or use of emails and attachments having left the Dodge County domain.

http://www.co.dodge.wi.us

Dodge County encrypts messages with EPHI or private information pertaining to

Wisconsin Act 138. http://www.co.dodge.wi.us/DC_secure_email.pdf

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA)

Subject: FAA COA request: Kansas City Missouri Police Department

Date: Wednesday, December 02, 2015 12:36:04 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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----Original Message----

From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, December 02, 2015 10:08 AM

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Thursday, November 26, 2015 2:17 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/uas/public_operations/

Message:

I work for the Kansas City Missouri Police Department and we are preparing to purchased a DJI Inspire 1 to assist in official police operations. I am interested in speaking with someone who can assist in the process.



Thank you for your assistance.

From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Reyes-Garcia, Dina (FAA); (b) (6) Rigol, Henry (FAA)

Subject: FAA COA Request: Kenosha County Sheriff's Dept, WI
Date: Tuesday, November 24, 2015 10:13:32 AM

Date: Tuesday, November 24, 2015 10:13:32 AM Attachments: Order 8900 1 Volume 16.docx

Aircraft Registration.docx

Public Declaration Letter Guidance.doc

image001.png image002.jpg

Good Morning,

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Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: (b) (6), (b) (7)(C)

Sent: Monday, November 23, 2015 9:21 AM **To:** Reyes-Garcia, Dina (FAA); Rigol, Henry (FAA)

Subject: RE: COA

Hello Dina and Henry,

I just wanted to follow up on this to see what the approximate turnaround time is for the application process.

Thank you for your time, Regards,



Kenosha County Sheriff's Dept 1000-55th Street Kenosha, WI 53140

(b) (6), (b) (7)

From: <u>Dina.Reyes-Garcia@faa.gov</u> [<u>mailto:Dina.Reyes-Garcia@faa.gov</u>]

Sent: Wednesday, November 18, 2015 5:46 PM

To: (b) (6), (b)

Cc: Henry.Rigol@faa.gov Subject: RE: COA

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Wednesday, November 18, 2015 3:31 PM

To: Reyes-Garcia, Dina (FAA)

Subject: COA

Hi Dina,

I would like to apply for a waiver for our Kenosha County Sheriff's Dept owned drone.

- 1. The name of the public entity is: Kenosha County Sheriff's Dept.
- 2. Small description of the UAS: DJI Phantom 3 Professional
- The concept of the operation: Our plan is to use the quad copter for aerial video and photos of crime scenes, accidents, tactical situations, search and rescue and training situations.

Please let me know if you have any questions or concerns, Regards,

(b) (6), (b) (7)(C)

Kenosha County Sheriff's Dept 1000-55th Street Kenosha, WI 53140

(b) (6), (b) (7)

From: (b) (6), (b) (7)(C)

Sent: Wednesday, November 18, 2015 2:05 PM

To: (b) (6), (b)

Subject: RE: My email address

Thank you for contacting the OE/AAA Support Desk regarding the completion of a Public (governmental/educational) COA.

<u>Dina.Reyes-Garcia@faa.gov</u> is the on-line COA administrator and will provide you with the necessary credentials needed for the system access. Please e-mail her the following for her to provide you with a COA username:

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Go Green! Print this email only when necessary. Thank you for helping CGH be environmentally responsible.

From: (b) (6), (b) (7)(C)

Sent: Wednesday, November 18, 2015 3:04 PM

To: (b) (6), (b) (7)(C)

Subject: My email address



Kenosha County Sheriff's Dept 1000-55th Street Kenosha, WI 53140

(b) (6), (b) (7)

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA); (b) (6)

Subject: FAA COA Request: Ocean County Sheriff's Office, NJ

Date: Saturday, November 28, 2015 11:56:44 AM
Attachments: Public Declaration Letter Guidance doc

Public Declaration Letter Guidance.doc Aircraft Registration.docx

Order 8900 1 Volume 16.docx

Sir,

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, November 25, 2015 12:51 AM

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Monday, November 23, 2015 12:26 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/uas/public_operations/

Message:

The Ocean County Sheriffs Office in New Jersey, is currently interested in purchasing a UAS for Law Enforcement purposes. Our County Counsel has provided a Declaration for Certificate of Authorization to the US Department of Transportation, FAA, on July 29th, 2015. As of this time we have not received any correspondences from the FAA. Would you kindly advise us of the proper procedure to receive authorization to operate a UAS.

Respectfully,

(b) (6), (b) (7)(C)

Ocean County Sheriffs Office
(b) (6), (b) (7)(C)

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)

Cc: Rigol, Henry (FAA); (b) (6) Reyes-Garcia, Dina (FAA)

Subject: FAA COA Request: Sauk County Sheriff"s Department, WI

Date: Wednesday, December 02, 2015 10:34:13 AM

Attachments: Aircraft Registration.docx

<u>Public Declaration Letter Guidance.doc</u> <u>Order 8900 1 Volume 16.docx</u>

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable
 executive acknowledging that the Proponent accepts all responsibility for ensuring
 that the UAS is airworthy and that the it will be operated and maintained in strict
 compliance with the manufacturer's operational and maintenance
 recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual operational missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard
 Operating Procedures (SOPs) for each phase of flight operation from notification
 for deployment through preflight, launch, recovery, post-flight and mission record
 keeping. SOPs must include, at a minimum, emergency procedures and
 standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
 Management, sterile ground control station protocols, PIC and VO standard
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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
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Respectfully,

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From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)(C)

Cc: Reyes-Garcia, Dina (FAA); (b) (6) Rigol, Henry (FAA)

Subject: FAA COA Request: ADAMS COUNTY SHERIFFS DEPT

Date: Monday, December 07, 2015 7:28:05 AM

Aircraft Registration.docx
Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

Good Morning,

Attachments:

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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----Original Message-----

From: Reyes-Garcia, Dina (FAA)

Sent: Saturday, December 05, 2015 11:36 PM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)

Subject: RE: COA USERNAME ACCESS

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Friday, December 04, 2015 3:25 PM

To: Reves-Garcia, Dina (FAA)

Subject: COA USERNAME ACCESS

ADAMS COUNTY SHERIFFS DEPT 306 STATE STREET NATCHEZ MS

PURCHASED A PHANTOM 3 PROFESSIONAL DRONE WITH CAMERA

THIS WILL BE A DRONE TO LEARN TO FLY THEN STEP UP TO A LARGER ONE TO BE USED IN OUR TATICAL RESPONSE TEAM ALONG WITH OUR SEARCH AND RESCUE

MY BADGE NUMBER (b) (6), (b) (7)(C)

MY CELL (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

Shamrock Drilling 118 Lower Woodville Road - Suite 2 Natchez, MS 39120 (b) (6), (b) (7)(C) From: (b) (6) To: (b) (6), (b) (7)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Date: Monday, November 30, 2015 10:05:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies (West of the Mississippi and Federal Agencies) that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115 (who processes all COA cases East of the Mississippi) we handle law enforcement/fire and first responder Agency UAS requests.

The short answer to your question is if your chief asks you to help with the use of your UAS you would no longer be operating as a hobby/recreational pilot so you would need approval from the FAA. I have provided background information on operations as a public aircraft operator however you may also want to review operations as a commercial operator under the FAA 333 Exemption program. That information can be found at http://www.faa.gov/uas/legislative_programs/section_333/

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115



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----Original Message----

From: 9-AFS-UAS-Inquiries (FAA)

Sent: Monday, November 30, 2015 5:51 AM

 $T_{0:}$ (b) (6)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Regards,

(b) (6)

FAA UAS Integration Office

www.faa.gov/uas

From: (b) (6), (b) (7)(C)

Sent: Thursday, November 26, 2015 2:21 PM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:
To Whom Concerns:

My name is (b) (6), (b) and I own a Phantom 3 Standard Quadcopter, I also own an AR. Parrott 2.0 Quadcopter, and a Sky Hunter Quadcopter I having been flying for some time. I am (b) (6), (b) (7) in Texas and have read about FAA wanting quadcopters registration, now all I want to do is if I am required to register, is to meet what the law requires. I only fly them recreationally, but if a missing person occurred I would like to know if my Chief asked me to look for a missing person with one I would legally able to do so, and if I have to register where do I get the form to register and how is it done. I mean can I download it off of the FAA website, fill it out and turn it in? I also have had citizens ask questions about their having to register their drones and I would like to be able to give them the right answers. I can be readily reached at my cell phone number listed below where my work number is also

available.

Any consideration in assistance on this matter would be well appreciated,

Thank you,

(b) (6), (b) (7)(C) Keene Police Department 203 W. Hillcrest Street, Keene, Texas 76059 (b) (6), (b) (7)(C)

From: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Date: Wednesday, November 18, 2015 3:42:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies (West of the Mississippi and Federal Agencies) that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115 (who processes all COA cases East of the Mississippi) we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific

training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a ... "What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: 9-AFS-UAS-Inquiries (FAA)

Sent: Wednesday, November 18, 2015 10:40 AM

 $T_{O:}$ (b) (6)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Further information can be found on our website: http://www.faa.gov/uas.

Regards,

(b) (6)

FAA UAS Integration Office www.faa.gov/uas

From (b) (6), (b) (7)(C)

Sent: Monday, September 28, 2015 2:46 PM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

Hi, my name is (b) (6), (b) (7)(C) with the Caddo Parish Sheriff's Office in Louisiana. I would like some clarity on Drone Usage in a Law Enforcement Capacity. I would appreciate any and all information you could forward to me. Thank you..

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Wednesday, November 18, 2015 3:49:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

As an introduction, I am a contractor with (b) (6)

Pederal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies (West of the Mississippi and Federal Agencies) that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115 (who processes all COA cases East of the Mississippi) we handle law enforcement/fire and first responder Agency UAS requests.

All UAS operations that are not for Hobby/recreational Purposes must have approval from the FAA since the Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message----

From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, November 18, 2015 11:14 AM

 T_{O} : (b) (6), (b) (7)(C)

 $Cc: \overline{(b)} (6)$

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with your questions. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, November 17, 2015 10:56 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

I am confused about the requirements for my Municipal Police Department's Phantom II. We use the Phantom to shoot video and photos of crime scenes and traffic accidents. The flights are line of sight and solely for documenting crime scenes and traffic accidents. What permit(s) does my agency need?

(b) (6), (b) (7)

Roswell Police Department

From: (b) (6) To: (b) (6), (b) (7)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Date: Thursday, November 19, 2015 8:54:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

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Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message----

From: 9-AFS-UAS-Inquiries (FAA)

Sent: Thursday, November 19, 2015 5:16 AM

 $T_{0:}$ (b) (6)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Further information can be found on our website: http://www.faa.gov/uas.

Regards,

(b) (6)

FAA UAS Integration Office

www.faa.gov/uas

 $F_{rom}(b)$ (6), (b) (7)(C)

Sent: Wednesday, November 18, 2015 6:10 PM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

I am a(b) (6), (b) (7) with the Denham Springs Police Department in Louisiana. My agency is currently looking at purchasing a small UAS for enforcement use. The city council is also about to vote on UAS use in the city. We are considering getting a system for use only under the 400' AGL restriction. I am having trouble interpreting what FAA rules will apply to our use of the system as law enforcement. If you could point me in the right direction it would be appreciated.

(b) (6), (b) (7)(C)

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Wednesday, December 02, 2015 10:46:00 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies (West of the Mississippi and Federal Agencies) that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115 (who processes all COA cases East of the Mississippi) we handle law enforcement/fire and first responder Agency UAS requests.

To answer your question, You can have either the City attorney or County Attorney provide the public declaration letter. ANs since I do not have a record of ever communicating with your department I have also attached the basic information we provide to public safety agencies wishing to operate a small unmanned aircraft in the national airspace system.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I

have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
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Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the

COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, December 02, 2015 7:39 AM

 $T_{O:}$ (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to learn more on COAs and the COA process.

----Original Message----From (b) (6), (b) (7)(C)

Sent: Monday, November 30, 2015 9:47 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:
-----Hello,

Im (b) (6), (b) with the Goodyear Police Department in Arizona. Im in the beginning process of purchasing a UAV for use in SWAT deployments. Myself and one other person would be the operators and we are in need of applying for a COA. Who should the declaration letter come from, ie. city or county attorney?

I would appreciate any assistance you could provide so I can begin the process with the FAA and acquire a COA.

Thanks,

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Certificate of Authorization

Date: Thursday, December 03, 2015 2:51:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

image001.png

(b) (6), (b) (7)(C)

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I am not aware of any coordination made to date from your agency on applying for a certificate of Waiver/Authorization (COA) so I have provided the following information that explains how a public agency can legally operate a small unmanned aircraft in the national airspace system.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Thursday, December 03, 2015 11:25 AM

To: Rigol, Henry (FAA)

Subject: Certificate of Authorization

Mr. Rigol,

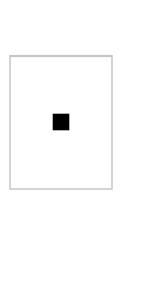
I am just doing a little follow-up to see where our agency stands regarding our application for a Certificate of Authorization. We have purchased a small drone and would like to establish protocols for use but I understand that we, as a law enforcement agency must first receive the certificate.

Thanks for your time,

(b) (6), (b) (7)(C)

Bell County Sheriff's Department 104 South Main Street Belton, Texas 76513

(b) (6), (b) (7)(C)



From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Certificate of Waiver or Authorization Erath County Sheriff"s Office (TX)

Date: Wednesday, November 25, 2015 8:16:00 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png

(b) (6), (b) (7)(C)

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(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, November 24, 2015 9:33 PM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: Certificate of Waiver or Authorization

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Tuesday, November 24, 2015 3:06 PM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6), (b) (7)(C)

Subject: Certificate of Waiver or Authorization

Ms. Garcia,

My name is (b) (6), (b) (7)(C), I am the (b) (6), (b) (7) for the Erath County Sheriff's Office in Stephenville, Texas. We purchased a DJI Inspire 1 unmanned aircraft. It is a small unit consisting of the body, camera, and (4) four propellers. I along with (b) (6), (b) (7)(C)

have received basic and intermediate flight certificates with the unit.

Our UAS program will mostly be utilized for search and rescue as we live in a rural community in Texas. We will also utilize the UAS to obtain crime scene photos of outdoor crime scenes as well as using it for aerial surveillance before law enforcement personnel are utilized in confronting an armed suspect who is outdoors.

We, as a Department, see the many advantages of the UAS program but want to operate it in a responsible manner while ensuring the safety of our Deputies, the public and both civil and commercial aviation. Your assistance and feedback in this matter will be greatly appreciated.

Respectfully submitted,

(b) (6), (b) (7)(C)

Erath County Sheriff's Office

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Contact information

Date: Thursday, December 10, 2015 8:04:00 AM

Attachments: COA Online Access Request Form.pdf
Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6)

As I mentioned on the phone, My name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

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Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

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owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Eliaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Wednesday, December 09, 2015 2:09 PM

To: (b) (6)

Cc: Farrell, Rick (FAA); (b) (6)

Subject: RE: Contact information

Thanks so much (b)

As I told you on the phone, the Dallas (TX) Police Department is exploring whether or not they want to start a drone program. They are hoping to utilize some of the best practices and/ or SOP's that currently exist.

The point of contact for this project is (b) (6), (b) (7)(C) and he is copied above for your convenience.

Any and all information you can send us to keep from having to reinvent the wheel would be most appreciated.



I truly appreciate your help. Good luck with your future endeavors.



City of Dallas
Department of Aviation
8008 Herb Kelleher Way
Dallas, TX 75235
(b) (6), (b) (7)(C)

NOTICE: This email and replies are subject to Texas Open Records laws and may be disclosed to the

This email and attachments are intended for the above name only and are confidential. If you are not the intended addressee, or the person responsible for delivering it to the intended addressee, you may neither copy, disseminate, nor distribute it to anyone else or use it in any unauthorized manner. To do so is strictly prohibited and may be unlawful. If you receive this email by mistake, please advise the sender immediately by using the reply facility in your mail software and delete it from your computer.

From: (b) (6)

Sent: Wednesday, December 09, 2015 3:55 PM

public upon request. Please respond accordingly.

To: Magee, Lanita

Cc: Rick.Farrell@faa.gov; (b) (6) (b) (6), (b) (7)(C)

Subject: RE: Contact information

(b) (6)

UAS Program office in Washington DC POC for Law Enforcement info is: (b) (6)

Steven will be a great source to assist in requesting COA for UAS use. Also, (b) (6), (b) (7)(C)

Best of li

(b) (6), (b) (7)(C)

Operations Support Group, AJV-C-23

(b) (6), (b) (7)

10101 Hillwood Parkway

Ft. Worth, Texas 76177

From: (b) (6), (b) (7)(C)

Sent: Wednesday, December 09, 2015 1:51 PM

To: (b) (6), (b) (7)(C)

Subject: Contact information



Thanks again for your help,



City of Dallas
Department of Aviation
8008 Herb Kelleher Way
Dallas, TX 75235

(b) (6), (b) (7)(C)

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From: (b) (6)

To: (b) (6), (b) (7)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Drone Questions

Date: Friday, November 20, 2015 4:49:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

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(b) (6)

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Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Friday, November 20, 2015 1:26 PM

To: (b) (6)

Subject: Drone Questions

Thanks!

(b) (6), (b) (7)(C)

Cincinnati Police Department

(b) (6), (b) (7)(C)

From: To:

Subject: RE: Law Enforcement Related COA In Minneapolis Metro Area

Friday, December 11, 2015 11:37:00 AM Attachments: Aircraft Registration - Copy (2).docx Order 8900 1 Volume 16 - Copy.docx

Public Declaration Letter Guidance - Copy.doc

image002.gif

Great to speak with you today.

Date:

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Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Friday, December 11, 2015 8:28 AM

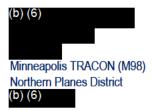
To: (b) (6)

Subject: Law Enforcement Related COA In Minneapolis Metro Area

I will be meeting with representatives from the Hennepin County Sheriff and the Anoka County Sheriff next Wednesday, Dec. 16th at 10 AM to discuss their proposal to implement the use of quad copters into their assets. We will be meeting with my counterparts at MSP FSDO at the FSDO office. We will be discussing the COA process and their proposed operations and the development of potential LOAs to accommodate their needs.

If we need your expertise on the COA process and experience with Law Enforcement use of drones, I would like to call you at (b) (6) to solicit your input.

My contact number is (b) (6). My office number is listed below. We look forward to working with you on this project.



From: (b) (6) To: (b) (6), (b) (7)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Law Enforcement UAS

Date: Tuesday, December 15, 2015 4:15:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.jpg

(b) (6), (b) (7)(C)

Sorry for the delay in getting back with you after our discussion. But as an introduction, I am a contractor with (b) (6)

Working for the Federal Aviation

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the

requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
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- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

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 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
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 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, December 15, 2015 9:38 AM

To: (b) (6)

Subject: FW: Law Enforcement UAS

From: (b) (6), (b) (7)(C)

Sent: Tuesday, December 15, 2015 9:08 AM

To: (b) (6)

Subject: RE: Law Enforcement UAS

Hi (b) (6)

Any possibility of getting that information we talked about? Also, have any other states set up large regional COA for rural area coverage. I will try to call early tomorrow as the AZ DPS is planning to pursue this initiative.

What is best time to call?

Best regards,



From: (b) (6), (b) (7)(C)

Sent: Monday, November 23, 2015 10:50 AM

To: (b) (6)

Subject: Law Enforcement UAS

(b) (6)

Good chatting this morning. Working with local police agency to explore setting up their program and would like to get the latest information as I'm sure things have evolved since we met back at the Annapolis Pre-Flt briefing (must be almost 2 years ago). Hopefully they will pursue as interest seem to be increased now that there is more public acceptance.

Happy thanksgiving.

Best regards,

(b) (6), (b) (7)



Engineering

(b) (6), (b) (7)(C)

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From: (b) (6) To: (b) (6), (b) (7)(C))

Cc: Moorman, Patrick (FAA); (b) (6) Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: LEA COA

Date: Wednesday, December 09, 2015 8:08:00 AM

Attachments: Aircraft Registration.docx
Order 8900 1 Volume 16 doc

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

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Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: (b) (6)
Sent: Tuesday, December 08, 2015 2:19 PM

To: (b) (6)

Cc: Moorman, Patrick (FAA)

Subject: LEA COA

Good evening (b) (6)

(b) (6) , copied above, is with NYS DEC. He's been tasked with starting the COA process for the New York State Police. Can you please reach out to him to help him get started? I'll also be happy to help in any way I can.

Thanks,



From: (b) (6)
To: (b) (6), (b) (7)(C)
Subject: RE: UAV for Law Enforcement

Date: Friday, December 11, 2015 9:30:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

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I would be happy to speak with you but I typically provide the below introduction information on operating a small unmanned aircraft in the national airspace system to give the interested party some background on what is expected of them as they proceed through the process.

Please look this information over and when you are ready, I will give you a call.

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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

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From: (b) (6), (b) (7)(C)

Sent: Friday, December 11, 2015 6:24 AM

To: (b) (6)

Subject: UAV for Law Enforcement

(b) (6), (b) (7)(C) gave me your name. I am interested in acquiring a UAV for our police agency. When you have a few minutes, can you give me a call. Thanks.

(b) (6), (b) (7)(C)

Oregon, Ohio Police Division

(b) (6), (b) (7)

From: Rigol, Henry (FAA)
To: (b) (6)

Cc: Reyes-Garcia, Dina (FAA); (6) Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Cobb County Police Dept, GA

Date: Thursday, December 17, 2015 8:23:52 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

image001.png image002.png image003.jpg

Good Morning,

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 Management, sterile ground control station protocols, PIC and VO standard
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Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, December 16, 2015 9:29 PM

To: (b) (6), (b) (7)
Cc: Rigol, Henry (FAA)
Subject: RE: Public COA

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Wednesday, December 16, 2015 1:25 PM

To: Reyes-Garcia, Dina (FAA) Subject: FW: Public COA

- 1. Cobb County Police Department
- 2. DJI Phantom III Quad copter
- 3. The UAS will be utilized by the Cobb County Police Department Special Operations Traffic Homicide Unit to take overhead pictures and video at the scene of a serious injury or fatality traffic collision. The scalable photos will be then used to forensically map the scene rather than a lengthy road closure. This UAS will allow us to open closed roadways sooner and increase the safety of our police officers.



From: (b) (6), (b) (7)(C)

Sent: 16 December, 2015 01:13 PM

To: (b) (6), (b) (7)
Subject: Public COA

Thank you for contacting the OE/AAA Support Desk regarding the completion of a Public (governmental/educational) COA.

<u>Dina.Reyes-Garcia@faa.gov</u> is the on-line COA administrator and will provide you with the necessary credentials needed for the system access. Please e-mail her the following for her to provide you with a COA username:

- 1. The name of the public entity
- 2. Small description of the UAS
- 3. The concept of the operation (a paragraph will suffice)

Please familiarize yourself with http://www.faa.gov/uas/public_operations/ while waiting for your login credentials.

Should you have additional questions please do not hesitate to contact us. Have a great day!



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This electronic mail message and any attached files contain information intended for the exclusive use of the individual or entity to whom it is addressed and may contain information that is proprietary, privileged, confidential and/or exempt from disclosure under applicable

law. If you are not the intended recipient, you are hereby notified that any viewing, copying, disclosure or distribution of this information may be subject to legal restriction or sanction. Please notify the sender, by electronic mail or telephone, of any unintended recipients and delete the original message without making any copies.

Go Green! Print this email only when necessary. Thank you for helping CGH be environmentally responsible.

From: Rigol, Henry (FAA)
To: (b) (6)

Cc: Reves-Garcia, Dina (FAA); (b) (6)

Subject: FAA COA Request: (b) (6)

Date: Thursday, December 17, 2015 8:27:01 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png image002.jpg

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (5) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Rigol, Henry (FAA); Steventon, John (FAA)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, December 16, 2015 9:30 PM

To: (b) (6), (b) (7)(C)
Cc: Rigol, Henry (FAA)

Subject: RE: Public COA for Unmanned Aerial Systems

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From: (b) (6), (b) (7)(C)

Sent: Wednesday, December 16, 2015 3:26 PM

To: Reyes-Garcia, Dina (FAA)

Subject: Fw: Public COA for Unmanned Aerial Systems

Mrs. Reyes-Garcia,

Here is the info on our drone.

- 1. Louisiana State Penitentiary
- 2. It is a Phantom 2/GPS enable/with a go-pro camera
- 3. It is used for surveillance of the prison grounds

Let me know if you need additional information.

Thanks,

(b) (6), (b) (7)(C)

DPS&C - LSP
(b) (6), (b) (7)(C)

#############################

---- Forwarded by JONATHAN LONDON/LSP/CORRECTIONS on 12/16/2015 02:20 PM -----

From: (b) (6), (b) (7)(C)

Date: 12/16/2015 02:19 PM

Subject: Public COA for Unmanned Aerial Systems

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From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C

Cc: Rigol, Henry (FAA)

Subject: FAA COA Request: (b) (6)

Date: Wednesday, December 30, 2015 2:29:54 PM

Attachments: Aircraft Registration.docx

Public Declaration Letter Guidance.doc Order 8900 1 Volume 16.docx

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Henry Rigol Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, December 29, 2015 2:30 PM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

I am trying to gather information in reference to our City Police and Fire Department purchasing and operating a UAV. After reading several web sites, I'm even more confused as to even where to start. I was hoping for some guidance or a contact person.

Thank you, (b) (6), (b) (7)

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7)(C)

Cc: (b) (6), (b) (7)(C) Rigol, Henry (FAA); Steventon, John (FAA)

Subject: FAA COA request for Peabody Fire Department, MA

Date: Tuesday, January 05, 2016 10:17:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

image001.png

Good Morning (b),

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 will be executed at the site in the event of an emergency (this could include
 execution of procedures outlined in the manufacturers supplied operator's flight
 manual, other possible alternative courses of action available for each phase of
 flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

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 Operating Procedures (SOPs) for each phase of flight operation from notification
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 standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
 Management, sterile ground control station protocols, PIC and VO standard
 communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Steve Pansky or myself with any questions or if we may be of any further assistance.

Respectfully	1
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Henry Rigol

Air Traffic Specialist, UAS Tactical Operations Section AJV-115 FAA Headquarters Ph 202-267-4013 henry.rigol@faa.gov

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Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Monday, December 28, 2015 1:59 PM

To: Reyes-Garcia, Dina (FAA)

Subject: FW: Public COA Information

Hello Dina.

Our fire department is looking for access to the your site to start a COA.

- 1. The name of the public entity. Peabody Fire Department
- 2. A small description of the UAS. DJI Phantom 3 Professional equipped with GPS & GLONASS, 4K camera
- 3. We would be using the UAS for recon in the following types of situations:

Wildfires – We don't have wildfires to the extent they do out on the west coast, but we do still put our crews out in the woods to contain and extinguish these types of fires. We would use a drone to quickly evaluate the extent and direction the fire was burning. We could then place crews in the best place to head the fire off and extinguish it quickly.

Structure Fires – The drone could be used to fly around the structure to give the incident commander a constant 360 degree view of the situation while still remaining at the command post.

Natural Disasters -

Peabody is very prone to flooding and the drone would be invaluable as to assessing the extent of flooding and any building that would need evacuating as well as identifying any person needing rescuing. Depending on the drone's payload, we could also bring them needed flotation devices.

Ice rescues – Locate and possibly bring a flotation device to the victim while rescuers are setting up.

Snow Emergencies – Last year we had several snow related roof collapses and the drone would make much easier to assess the size and scale of the collapse rapidly.

Hurricanes – This would be in invaluable tool used to assess the damage after a hurricane or other severe weather related emergencies.

Technical Rescue – Peabody currently has 5 members on the regional technical rescue team. Having the ability to fly over a disaster area/structure collapse would give us much needed information that we need rapidly, currently we have to wait for news helicopters and communications (video patch) equipment from some distance away to get on scene (can take up to 2 hours or more).

Preplan operations – We could use the drone to get pictures of all the sides, tops of buildings and the area surrounding the building. Google earth just doesn't always give us enough detail.

Hazardous Material Situations – This would be an invaluable resource; we could send it into the hot zone to identify the chemical, # of victims, without having to immediately put our personnel in harm's way of an unknown chemical emergency.

It would be a great way to capture video of any of the above incidents for documentation purposes.

Mutual Aid – We would make the drone and our trained personnel available as part of the mutual aid agreements with 36 cities and towns of Essex County

Thank You,



Peabody Fire Department 41 Lowell St Peabody MA 01960 (b) (6), (b) (7)(C)

russ.lewis@peabody-ma.gov

From: Rigol, Henry (FAA)

To: (b) (6), (b) (7) (C)

Cc: (a) (6), (b) (7) (C)

(b) (6)

Subject: FAA COA Request for Walworth County Sheriff"s Office, WI

Date:Monday, December 28, 2015 6:55:57 AMAttachments:Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

Aircraft Registration.docx

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) an Air Traffic and Law Enforcement (15) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Rigol, Henry (FAA)

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: (b) (6), (b) (7)(C)

Sent: Friday, December 25, 2015 9:10 AM

To: Rigol, Henry (FAA)
Cc: (b) (6), (b) (7)(C)

Subject: Public COA

Greetings:

This is (b) (6). (b) (7)(C) of the Walworth County Sheriff's Office in Wisconsin. We are in the process of purchasing an unmanned aerial vehicle and would like to begin the COA process. Below is the information I was told you would need to start this process and to obtain the necessary credentials to the FAA website application. I have also submitted a request to our county corporation counsel for a letter of authority that will establish our law enforcement status. If you can direct me to the person(s) that this letter will need to be forwarded to that would be a great help.

Name of public entity: Walworth County Sheriff's Office

Description of UAS: DJI Phantom 3 Advanced

Concept of Operation: To be used by the Walworth County Sheriff's Office personnel in accordance with all state and federal laws, Walworth County policies and procedures, for the purposes of law enforcement. This may include but not limited to, search and rescue, vehicle crash investigations, evidence retrieval, tactical situations, public outreach, criminal investigations, scene documentation and other activities authorized by the Sheriff of Walworth County. All employees that are assigned to operate the UAS will have training regarding, the safe operation of a UAS, department/county policies and procedures, and the local state/federal laws.

If you have any questions, concerns or simply need to contact me, I have also listed my personal cell

number below.

Regards,

(b) (6), (b) (7)(C)

Walworth County

Sheriff's Office
(b) (6), (b) (7)(C)

From: (b) (6) To: (b) (6), (b) (7)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Operating a small unmanned aircraft in the national airspace system

Date: Wednesday, December 30, 2015 11:51:00 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc



working for the Federal Aviation Administration Unmanned
Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator
for all law enforcement (LEA) Fire, and First Responder Agencies (West of the Mississippi and
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Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety
Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol,
Air Traffic Specialist, UAS Tactical Operations, AJV-115 (who processes all COA cases East of the
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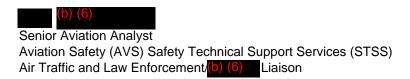
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The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

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Respectfully,



Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations, Emerging Technologies Team, AFS-85/AJV-115 (b) (6)

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From: (b) (6)
To: (b) (6), (b)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Operating a UAS in The NAS as a Public Aircraft Operator

Date: Tuesday, December 22, 2015 4:50:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc



Great to speak with you a few minutes ago. As a more formal introduction, I am a contractor with working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115, we handle law enforcement/fire and first responder Agency UAS requests.

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Once you have digested the information I am sure you will have many more questions and how you might go about developing a program that can provide training to LEAs across the county. Look forward to speaking with you early next year.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6)
Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115
(b) (6)

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From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA): Steventon, John (FAA)

Subject: RE: City of Bastrop TX Drone Program

Date: Monday, January 04, 2016 8:32:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

image001.png image002.jpg image003.png

(b) (6), (b) (7)

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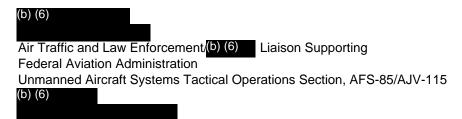
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Respectfully,



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From: Reyes-Garcia, Dina (FAA)

Sent: Sunday, January 03, 2016 9:55 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: FW: City of Bastrop TX Drone Program

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



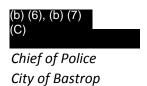
From: (b) (6), (b) (7)(C)

Sent: Tuesday, December 22, 2015 11:38 AM

To: Reyes-Garcia, Dina (FAA)

Subject: City of Bastrop TX Drone Program

The City of Bastrop's (TX) Emergency Management Division would like to start a drone program. The reason for this program is to better assist us in emergency situations. These situations would include flooding of the Colorado River, wildfires and homes in the direct path, lost child/elderly people, and survey damage caused by mother nature. We would have two drones in our fleet. They would be operated by either the emergency management coordinator, assistant emergency management coordinator or the fire chief. The drones will both be identical. We will be using the DJI Phantom 3 Advanced Quadcopter. This drone has a 20 minute flight time, 1080 camera, and will be the right fit for our purpose. Please let me know if I can answer any other questions and what the next step in the process would be. Thank you



(b) (6), (b) (7)(C)

104 Grady Tuck Ln | Bastrop, TX 78602 Main (512) 332-8600 | Fax (512) 332-8619



"Building Positive Relationships Through Transparency in Law Enforcement"

From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: COA user name

Date: Tuesday, January 05, 2016 10:14:00 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png

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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

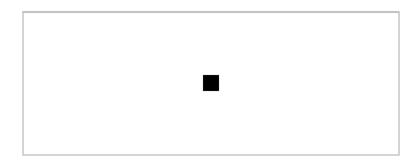
Sent: Tuesday, January 05, 2016 7:02 AM

To: (b) (6), (b)

Cc: (b) (6)

Subject: RE: COA user name

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From: (b) (6), (b) (7)(C)

Sent: Monday, December 28, 2015 4:42 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** COA user name

Hello, (b) (6), (b) (7)(C)

requested me to provide you with information:

 Payne County Sheriff Office Stillwater, OK
 (b) (6), (b) (7)(C)

- 2. Our UAS is a DJI Inspire 1 with dual remotes.
- 3. Our UAS will be used in several different roles within the Sheriff's Office. First and foremost will be to help provide officer and public safety in any emergency situation. The UAS will be primarily used for the Sheriff's office but it will also be used to assist any official county business. The UAS will be flown according to FAA rules and regulations as well as department and county policy.

(b) (6), (b) (7)(C)

Payne County Sheriff Office 606 S Husband Rm. 106 Stillwater, OK 74074 Office:405/533-6856

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6).

Cc: Steventon, John (FAA); Wilson, Mike (FAA); Rigol, Henry (FAA)

Subject: RE: COA

Date: Monday, January 04, 2016 1:34:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

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- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
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 for each phase of flight, and any outside agencies or resources for medical and fire or other
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 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Wilson, Mike (FAA)

Sent: Monday, January 04, 2016 10:19 AM

To: (b) (6) Steventon, John (FAA)

Cc: (b) (6), (b) (7)
Subject: FW: COA

Hi (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C) who attended one of my briefs and is attempting to acquire an application for an LEA COA for the Oconee County Sheriff's Office in Athens, GA. We have had a discussion regarding the value of both the standard LEA COA and the 333 exemption. Can you help him with a password please for an on-line application for the Public a/c LEA COA, and figure out who would be the COA processor to help him please?

Thanks. Happy New Year! //mike

r/

Michael K. Wilson Aviation Safety Inspector Unmanned Aircraft Program Manager Southern Region, NextGen Branch ASO-220 1701 Columbia Avenue College Park, Georgia 30337 (O) 404.305.6038 (C) 404.915.6788

Mike.Wilson@faa.gov

From: (b) (6), (b) (7)(C)

Sent: Monday, January 04, 2016 10:28 AM

To: Wilson, Mike (FAA)

Subject: COA

Mike,

Thank you for taking the time to talk with me this morning. Below is my contact information. My cell phone number is not listed it is: (b) (6), (b) (7).

Thanks,

(b) (6), (b) (7)(C)

Criminal Investigation Division Oconee County Sheriff's Office 1140 Experiment Station Road Watkinsville, GA 30677

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Drone application

Date: Monday, January 04, 2016 8:27:00 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

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Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

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(b) (6)

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----Original Message----

From: Reyes-Garcia, Dina (FAA)

Sent: Sunday, January 03, 2016 9:13 PM

To: (b) (6), (b)

 $Cc: (\overline{b}) (\overline{6})$

Subject: RE: Drone application

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Monday, December 21, 2015 1:55 PM

To: Reyes-Garcia, Dina (FAA) Subject: Drone application

This is (b) (6), (b) (7)(C) with the Sequoyah county sheriff dept. 119 South Oak sallisaw Oklahoma 74955. (b) (6), (b) . We have obtained a phantom 3 professional drone and we need to obtain credentials so we can complete the process. We will be using the drone for manhunts. Missing children aerial support during search warrants and to take aerial shots of crime scenes. Can you tell me how to complete this process

Sent from my iPhone

From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA): Steventon, John (FAA)

Subject: RE: Drone Registration Login Credentials

Date: Tuesday, January 05, 2016 4:00:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png

(b) (6)

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Air Traffic and Law Enforcement (b) (6)
Liaison Supporting
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Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, January 05, 2016 12:24 PM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: Drone Registration Login Credentials

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From: (b) (6), (b) (7)(C)

Sent: Monday, January 04, 2016 2:56 PM

To: Reyes-Garcia, Dina (FAA)

Subject: Drone Registration Login Credentials

- 1. Vidalia Police Department, Vidalia, Louisiana
- DJI Phantom 2 Vision+ Quadcopter Flying Camera Model PV331
- 3. The drone program for the Vidalia Police Department is an initiative to further enhance the capabilities of the Department. The drone will be used for monitoring large events, emergency situations, crash investigation, and other uses as deemed necessary. When necessary or if in doubt, a warrant will be obtained for the use of the drone. The drone will be used for official police work only.

Vidalia Police Department 202 Vernon Stevens Blvd. Vidalia, LA 71373 (b) (6), (b) (7)(C)

Follow us on Facebook http://www.facebook.com/VidaliaPoliceDepartment

Privileged: This e-mail contains PRIVILEGED and CONFIDENTIAL information intended only for the use of the specific individual or entity named above. If you or your employer is not the intended recipient of this e-mail or an employee or agent responsible for delivering it to the intended recipient, you are hereby notified that any unauthorized dissemination or copying of this e-mail is strictly prohibited. If you have received this transmission in error, please immediately contact the sender and destroy the material in its entirety, whether in electronic or hard copy format.

Contents of communications either originating from or received by the City's E-mail messaging system are not endorsed by the City of Vidalia and Parish of Concordia. Communications made through City E-mail shall in no way be deemed to constitute legal notice to the City of Vidalia or any of its agencies, officers, employees, agents, or representatives in any capacity, with the respect to any existing or potential claim or cause of action against the City or any of its agencies, officers, employees, agents, or representatives in any capacity, where notice to the City is required by any federal, state or local law, rule, or regulation.

From: (b) (6) To: (b) (6), (b) (7)

Cc: ; Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: FAA UAS Contact

Date: Tuesday, December 29, 2015 8:01:00 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

image001.png



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 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
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 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that

describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Eliaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: (b) (6), (b) (7)(C)
Sent: Monday, December 28, 2015 4:12 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: FAA UAS Contact



It was a pleasure talking to you today. Hopefully, some of the information that I provided was helpful. As I mentioned, an ally and advocate of law enforcement's use of UAS at the FAA has been (copied here). I'm sure he can provide you additional information on how to get a law enforcement UAS operation up and running, as well on advice on which avenue to take.

Feel free to contact me anytime,



(D) (7)

Houston Police Department - PDD

(b) (6), (b) (7)(C)

Airborne Law Enforcement Association 50 Carroll Creek Way, Suite 260 Frederick, MD 21701

Frederick, MD 2170

(b) (6), (b) (7)(C)

From: <u>Steventon, John (FAA)</u>
To: (b) (6), (b) (7)

Cc: Rigol, Henry (FAA); (b) (6)
Subject: RE: FAA UAS LAW ENFORCEMENT RESOURCES
Date: Monday, January 04, 2016 2:39:38 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

It was good talking with you earlier today. As I mentioned when we talked I'm forwarding you the information letter from Henry Rigol who is currently working the requests in your region so he has visibility on and tracking of your request for information. Hope this answers most of your questions.



Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and an Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to **begin an application process**, the agency (or proponent) will be asked to provide the FAA with a "**declaration letter**" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized

as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable
 executive acknowledging that the Proponent accepts all responsibility for ensuring that
 the UAS is airworthy and that the it will be operated and maintained in strict compliance
 with the manufacturer's operational and maintenance recommendations.
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Aviation Safety Inspector HQ, Federal Aviation Administration Unmanned Aircraft System Integration Office, AFS-84 470 L'Enfant Plaza, Suite 7100, Room 703 Washington DC, 20024

Phone: (202) 267-8143

E-Mail: john.steventon@faa.gov

From: (b) (6), (b) (7)(C)

Sent: Monday, January 04, 2016 1:09 PM To: Steventon, John (FAA)

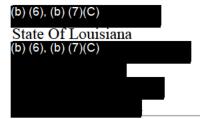
Subject: FAA UAS LAW ENFORCEMENT RESOURCES

Hello

Mr. John Steventon, FAA

Thank you for taking time to speak with me about UAS Law Enforcement Operations. Please forward the information packet for setting up our operation.

Thanks Again





This email has been sent from a virus-free computer protected by Avast. www.avast.com

From:

To: Cislo, Timothy J (FAA)

Cc: Santa-Elena, Edward P (FAA); (b) (6), (b) (6), (b) (7)(C) Maibach, Joseph (FAA)

Subject: RE: Honolulu Police Department contacts
Date: Tuesday, December 29, 2015 6:20:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

So as promised here is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

And the contact information for my counterpart who handles the non- public safety/first responder city, county, state and federal agencies is;

Joseph Maibach Joseph.Maibach@faa.gov 202-267-9060

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
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 manufacturers supplied operator's flight manual, other possible alternative courses of action available
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 assistance) Basically, this is a .."What will you do if something bad happens?).

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 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
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 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact me with any questions or if I may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Cislo, Timothy J (FAA)

Sent: Tuesday, December 29, 2015 2:58 PM

To: (b) (6)
Cc: Santa-Elena, Edward P (FAA)

Subject: Honolulu Police Department contacts

(b) (6)

Thanks for taking the time to brief our local police force representatives. For your information, their contact information:

(b) (6), (b) (7)(C)

I'm sure they'd appreciate any additional guidance and information.

Regards,

Tim

Timothy J. Cislo Aviation Safety Inspector – Airworthiness Honolulu FSDO T 808-837-8327 F 808-837-8399 From: (b) (6) To: (b) (6).

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: law enforcement and UAS

Date: Monday, December 28, 2015 8:01:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies (West of the Mississippi and Federal Agencies) that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115 (who processes all COA cases East of the Mississippi) we handle law enforcement/fire and first responder Agency UAS requests.

To answer your question, you will need to register your aircraft and that information is denoted below along with the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: 9-AFS-UAS-Inquiries (FAA)

Sent: Thursday, December 24, 2015 10:24 AM

To: (b) (6)

Subject: FW: law enforcement and UAS

Regards,

(b) (6

FAA UAS Integration Office www.faa.gov/uas

From: (b) (6), (b) (7)(C)

Sent: Thursday, December 24, 2015 12:09 AM

To: 9-AFS-UAS-Inquiries (FAA) **Subject:** law enforcement and UAS

Good Morning!

My name is (b) (6), (b) (7)(C) and I work for Walton Hills Police Department. (b) (6), (b) (7)(C)

. We just recently received a UAS as a donation and was just wondering since we are a government agency do we need to do anything different for the registration of said UAS. I appreciate any information you can find out for me.

Thanks

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Law Enforcement Drones

Date: Wednesday, December 30, 2015 12:18:00 PM

Attachments: ac91-57.pdf

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

(b) (6)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies (West of the Mississippi and Federal Agencies) that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115 (who processes all COA cases East of the Mississippi) we handle law enforcement/fire and first responder Agency UAS requests.

To answer your question, the pilot in command (PIC) of the aircraft does need to meet certain qualifications based on the operating location where they would be flying the UAS. So if the operating location were in Class G airspace, at or below 400 Feet Above the Ground (AGL), Visual line of sight of the UA in Visual flight rule (VFR) weather conditions, day time operations greater than 5 Nautical Miles from an airport or Heliport, all the PIC would need to have is to complete the FAA private pilot ground school and pass the written exam (See FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16, chapter 4, Section 16-4-1-3, B.5 attached). If they operate outside of the parameters addressed above then they would need to have as a minimum of a private pilot license.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office.

You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the

agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, Mr. Henry Rigol or myself with any questions or if we may be of any further assistance.

Respectfully,

Steve Pansky (b)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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-----Original Message----From: (b) (6), (b) (7)(C)
Sent: Wednesday, December 30, 2015 9:08 AM

 $T_{O:}$ (b) (6), (b) (7)(C)

Subject: Law Enforcement Drones

Hi, I'm (b) (6), (b) (7)(C) with the Valley Center Police Dept. In Kansas and we have been looking into getting a DJI Phantom 3 Professional Drone and I just had a few questions as to what the FAA would require from us, would the operator of the Drone need a certain certification? I already know about the registration, and COA exception is there anything else that the FAA requires?

Thank you for your time (b) (6), (b) (7)(C)

 From:
 (b) (6)

 To:
 (b) (6), (b) (7)(C)

 Cc:
 Jackson, Jacqueline R (FAA)

Subject: RE: UAS Ops

Date: Thursday, December 17, 2015 2:14:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6)

asked me to contact you to assist in providing information on operating a unmanned aircraft system in the national airspace. As an introduction, I am a contractor with b (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies (West of the Mississippi and Federal Agencies) that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84 and Mr. Henry Rigol, Air Traffic Specialist, UAS Tactical Operations, AJV-115 (who processes all COA cases East of the Mississippi) we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14

CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

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 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
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 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please let me know if you would like to speak at some point in the future to discuss a UAS program. I am sure the above information will generate questions.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Jackson, Jacqueline R (FAA)

Sent: Wednesday, December 16, 2015 1:20 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: UAS Ops

Hello (b) (6)

We met at the KY Transportation Conference in Lexington last week. Mr. (b) (6) is my POC for Law Enforcement activities and will be reaching out to you to assist with getting your UAS program moving and to answer any questions you may have.

Good luck with your program and feel free to contact me if you have questions.

Best regards.

Jackie Jacqueline R. Jackson Manager, Tactical Operations Section Emerging Technologies Team (AJV-115)

WK:202-267-8177

BB: 202-770-7166

Email:Jacqueline.r.jackson@faa.gov

From: (b) (6) To: (b) (6), (b) (7)

Cc: Steventon, John (FAA); Gammon, Matt (FAA)

Subject: Operating a small Unmanned Aircraft System in the national Airspace System

Date: Tuesday, January 26, 2016 8:20:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

Auburn Police Department



Your name was forwarded to me through (b) (6), (b) (7)(C) from the FAA's Western Service Area. As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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(b) (6), (b) (7)(C)

Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6). Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115
(b) (6), (b) (7)(C)

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From: Rigol, Henry (FAA)
To: (b) (6), (b) (7)
Cc: (b) (6)

Subject: FAA COA request Arnold, MO Police Department

Date: Monday, January 18, 2016 3:59:20 PM
Attachments: Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx Aircraft Registration.docx

Sir,

This message is sent on behalf of (b) (6)

As an introduction, I am a contractor with (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, and Mr. henry Rigol, Air Traffic Control Specialist, AJV-115 we handle law enforcement/fire and first responder Agency UAS requests.

I show no record of your agency providing this office with a Public Declaration Letter denoting the London Police Department as a political Sub-division of the State of Kentucky for the purposes of operating as a public aircraft operator. If you have a copy of the that letter would you please forward it to me and I will start the COA process. Please understand that just making an inquiry through the internet does not start the COA process and someone from the FAA should have responded to you with the information I have provided below.

So, below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).

- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have

starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: (b) (6), (b) (7)(C)

Sent: Monday, January 18, 2016 10:32 AM

To: Rigol, Henry (FAA)

Subject: Public COA for Arnold, MO Police Department

Sir,

I am sending you this email in response to a voicemail message that I received from you. Thank you for taking the time to respond and put me at ease about the process. I look forward to reviewing the information that you will send over. Just as a reminder this was in regards to obtaining a Public COA to operate a DJI Phantom 3 Adv. UAS for the purpose of documenting crime scenes and accident reconstruction for the City of Arnold, MO Police Department.

Thank you in advance,

(b) (6), (b) (7)(C)

City Of Arnold Police Department

(b) (6), (b) (7)(C)

From: Rigol, Henry (FAA)

To: (b) (6)

Cc: Reyes-Garcia, Dina (FAA); (b) (6); Rigol, Henry (FAA)

Subject: FAA COA request for Richland County Sheriff"s Office (Ohio)

Date: Sunday, January 10, 2016 4:28:36 PM

Attachments: <u>image001.png</u>

Sir,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (D) (G) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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 that the UAS is airworthy and that the it will be operated and maintained in strict
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 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we

developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: Reyes-Garcia, Dina (FAA)

Sent: Friday, January 08, 2016 5:43 PM

To: (b) (6), (b)
Cc: Rigol, Henry (FAA)
Subject: RE: UAV

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Friday, January 08, 2016 9:54 AM

To: Reyes-Garcia, Dina (FAA)

Subject: UAV

Ms. Reyes-Garcia,

Here is the following information that you requested for the log on information.

Our department: Richland County Sheriff's Office (Ohio)

Description of the UAV: DJI Phantom 2 Vision +

Concept of Operation: This UAV was donated to our department by our local Project Life Saver group. This UAV will primarily will be used in the search of individuals with Alzheimer, Dementia, Autism or any related conditions who have a tendency of wandering away from home and are not able to find their way back home. Project Life Save puts a radio transmitter either on the clients wrist or ankle and transmits a signal to a receiver that the department has and we are able to locate those individuals withing the national average of 1/2 hour. This UAV is going to be used in conjunction with the Project Life Saver transmitters and equipment to help locate those individuals that wander but more importantly help locate individuals who may not be on the program but still wander.

Sincerely,

(b) (6), (b) (7)(C)

Richland County Sheriff's Office Community Policing/Public Relations (b) (6), (b) (7)(C) From: Rigol, Henry (FAA)

To: (b) (6)

Cc: Reyes-Garcia, Dina (FAA); Rigol, Henry (FAA); (6)

Subject: FAA COA request for (b) (6)

Date: Monday, January 11, 2016 4:15:51 PM

Attachments: Aircraft Registration.docx

Public Declaration Letter Guidance.doc

Order 8900 1 Volume 16.docx

image001.png

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and Air Traffic and Law Enforcement (b) (6) Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
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From: Reyes-Garcia, Dina (FAA)

Sent: Monday, January 11, 2016 11:46 AM

To: (b) (6), (b)

Cc: Rigol, Henry (FAA)

Subject: RE: Registration for government agency

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Monday, January 11, 2016 9:16 AM

To: Reyes-Garcia, Dina (FAA)

Subject: Registration for government agency

Good Morning,

I am sending you this request in order to be registered to use the FAA COA website. (b) (6), (b) (7) provided me with your contact info. Per her instructions, I am including the base information below.

Agency Name: Pender County Sheriff's Office

605 E. Fremont St.

Burgaw, N.C. 910-259-1212

UAS description: Undetermined as yet. Looking at a DJI Phantom 3. (Weight is @ 2.8 lbs.) If not that unit, then one similar.

Operational Concept: To be used by the Sheriff's Office alone or in conjunction with other county agencies for Search and Rescue, Haz-Mat responses, Environmental Surveys and assisting in locating persons, property or equipment related to law enforcement duties. Use to be determined by the Sheriff and a SOP developed.

Point of Contact at Present: (b) (6), (b) (7)



Thank You.

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA); Reyes-Garcia, Dina (FAA)

Subject: Operating a small unmanned aircraft in the national airspace system

Date: Monday, January 11, 2016 9:01:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6),

As an introduction, I am a contractor with (b) (6), (b) (7)(C) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, and Mr. henry Rigol, Air Traffic Control Specialist, AJV-115 we handle law enforcement/fire and first responder Agency UAS requests.

I show no record of your agency providing this office with a Public Declaration Letter denoting the London Police Department as a political Sub-division of the State of Kentucky for the purposes of operating as a public aircraft operator. If you have a copy of the that letter would you please forward it to me and I will start the COA process. Please understand that just making an inquiry through the internet does not start the COA process and someone from the FAA should have responded to you with the information I have provided below.

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Respectfully,

(b) (6

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message----

From: Reyes-Garcia, Dina (FAA) Sent: Friday, January 08, <u>2016</u> 2:50 PM

To: Rigol, Henry (FAA); (b) (6), (b) (7)(C)

Subject: FW: Importance: High

(b) (6), (b)

Have you had any contact with this individual?

d.

----Original Message----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, January 05, 2016 2:03 PM

To: Reyes-Garcia, Dina (FAA)

Subject:

Can you give me a status on our Certificate of Waiver that we requested?

Thank you. (b) (6), (b)

London Police (b) (6), (b) (7)

__

(b) (6), (b) London Police

503 South Main St.

London, Ky 40741 (b) (6), (b) (7)(C)

Confidential: This electronic message and all contents contain information from The London Police Department and its affiliates which may be confidential or otherwise protected from disclosure. The information is intended to be for the addressee only. If you are not the addressee, any disclosure, copy, distribution or use of the contents of this message is prohibited. If you have received this electronic message in error, please notify us immediately at (606)878-7004 and destroy the original message and all copies

From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: Operations of a Small UAS in the National Airspace System

Date: Monday, January 11, 2016 8:41:00 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png image002.jpg

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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(b) (6)

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From: Reyes-Garcia, Dina (FAA)

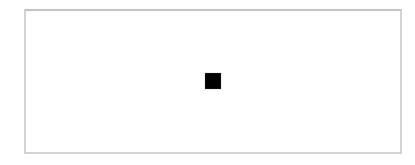
Sent: Friday, January 08, 2016 2:46 PM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: COA -

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Friday, January 08, 2016 10:50 AM

To: Reyes-Garcia, Dina (FAA)

Subject: COA -

Ms. Reyes-Garcia

- 1. The name of the public entity is: Power County Sheriff's Office
- 2. Description of the UAS: It is a Blade 350 Quadcopter by Horizon Hobbies. It is approximately 1 lb. fully loaded. There is an attachment for a GoPro camera. It will fly for approximately 10 to 15 minutes per charge.
- 3. The Concept is as follows: I am on an Officer Involved Shooting Team. At these investigations I want to use the UAS to photograph the scene from the air. We currently do this by using a medical helicopter "Life Flight" or the Fire Department, or it is not done. I will also use the UAS for criminal investigations. on current homicide I am working I utilized the UAS to fly over a patch of land where a person told me my victim was buried. A review of that video clearly showed no ground disturbance in that area.

(b) (6), (b) (7)(C)

Power County Sheriff's Office American Falls, Idaho 83211

(b) (6), (b) (7)(C)

NOTICE: This message is covered by the Electronic Communications Privacy Act, Title 18, United States Code, §§ 2510-2521. This e-mail and any attached files are the exclusive property of the Power County Sheriff's Office and are deemed privileged and confidential, and are intended solely for the use of the individual(s) or entity to whom

this e-mail is addressed. If you are not one of the named recipient(s) or believe that you have received this message in error, please delete this e-mail and any attachments and notify the sender immediately. Any other use, re-creation, dissemination, forwarding or copying of this e-mail is strictly prohibited and may be unlawful. Receipt by anyone other than the named recipient(s) is not a waiver of any attorney-client, attorney work product, or other applicable privilege or Active Criminal investigation. Thank you

From: (b) (6)

To: (b) (6)

Cc: Steventon, John (FAA)

Subject: RE: Public COA

Date: Tuesday, January 19, 2016 10:04:00 AM Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

image001.png

(b) (6), (b) (7)

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Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

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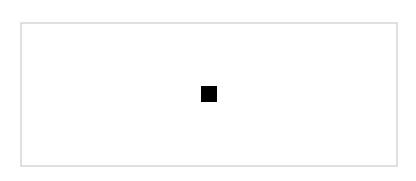
Sent: Tuesday, January 19, 2016 5:25 AM

To: (b) (6), (b) (7)

Cc: Rigol, Henry (FAA); (b) (6)

Subject: RE: Public COA

Thank you. Your case has been assigned to Mr. Henry Rigol, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Wednesday, January 13, 2016 4:28 PM

To: Reyes-Garcia, Dina (FAA)

Subject: Public COA

Hi!

I am the (b) (6), (b) (7)(C) for the Niagara County Sheriff's Office. We recently purchased a small unmanned aerial vehicle and i am looking to acquire a COA to operate in out county.

- 1. The name of the public entity. Niagara County Sheriff's Office
- 2. A small description of the UAS. DJI Phantom 2+
- 3. The concept of operation (small paragraph will suffice) We will utilize the vehicle to assist in missing persons cases, crime scene investigations, emergency scene survey and other police related incidents. The vehicle will be used according to established policy with departmental accountability for the usage and flight.

I would like the access to your system complete the application process.

Thanks!

(b) (6), (b) (7)(C)

Niagara County Sheriff's Office PO Box 496 Lockport, New York 14095

(b) (6), (b) (7)

Notice: This electronic transmission is intended for the sole use of the individual or entity to which it is addressed and may contain confidential, privileged or otherwise legally protected information. If you are not the intended recipient, or if you believe you are not the intended recipient, you are hereby notified that any use, disclosure, copying, distribution, or the taking of any action in reliance on the contents of this information, is strictly prohibited. Niagara County is not responsible for the content of any external hyperlink referenced in this email or any email.

IF YOU HAVE RECEIVED THIS TRANSMISSION IN ERROR, PLEASE NOTIFY THE SENDER IMMEDIATELY BY EMAIL AND DELETE THE ORIGINAL MESSAGE ALONG WITH ANY PAPER OR ELECTRONIC COPIES.

Thank you for your cooperation.

From: (b) (6)
To: (b) (6), (b)
Cc: Steventon, John (FAA)

Subject: RE: Public COA

Date: Tuesday, January 19, 2016 11:13:00 AM

Attachments: Aircraft Registration.docx
Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

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working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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 operational and maintenance recommendations.
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 for each phase of flight, and any outside agencies or resources for medical and fire or other
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 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
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 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, January 19, 2016 7:39 AM

To: (b) (6)

Subject: Public COA

Good morning (b) (6)

I just spoke with you regarding our agency wanting to start the Public COA process.

Please provide me with all the necessary details.

Thank you,

(b) (6), (b) (7)(C)

Miami-Dade Schools Police Department School Board Administration Building

1450 N.E. 2nd Avenue, Miami, Fl. 33132

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: COA for Abilene, Texas Police Department

Date: Monday, January 11, 2016 8:24:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

image001.png

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Air Traffic and Law Enforcement (b) (6)
Eliaison Supporting
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(b) (6)

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From: Reyes-Garcia, Dina (FAA)

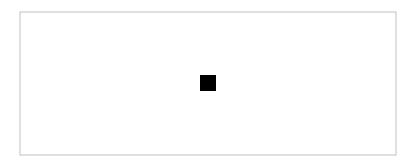
Sent: Friday, January 08, 2016 2:37 PM

To: (b) (6), (b) Cc: (b) (6)

Subject: RE: COA for Abilene, Texas Police Department

Importance: High

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Thursday, January 07, 2016 9:50 AM

To: Reyes-Garcia, Dina (FAA)

Subject: COA for Abilene, Texas Police Department

Good Morning,

I was given your contact information by (b) (6), (b) (7) at the help desk.

I am requesting credentials to access the COA Online System.

(b) (6), (b) (7)(C) for the Police Department in Abilene, Texas. We are seeking authorization to operate a UAS for departmental purposes.

While the exact UAS system has not been decided, we are searching for a small UAS weighing less than six pounds. The UAS will be utilized in an incident driven type mission for the purposes of aerial crime scene photography, traffic accident reconstruction, SWAT incidents, Bomb Squad Incidents, Missing Persons Investigations, etc. We would like a system that will operate aloft for approximately 30 minutes, at altitudes less than 300 AGL, and transmit live video to the operator or incident commander. We will also likely utilize the UAS to assist our fire department as needed. The UAS will not be used for long term surveillance. It will strictly be utilized on a per incident basis. The system will be portable, utilizing rechargeable batteries, and preferably be contained in a backpack or pelican style case.

(b) (6), (b) (7)(C) of the UAS as I am an instrument rated pilot. The backup pilot holds a private pilot license. We will operate the UAS within the city limits of Abilene, Texas within Abilene's Class C Airspace. We will also utilize the UAS within a 21 county surrounding area which defines the area of responsibility for Abilene PD's SWAT Team and Bomb Squad. The airspace surrounding Abilene is largely uncontrolled.

Thank you very much for your time. I look forward to working with you.

Respectfully,

(b) (6), (b) (7)(C)

Abilene Police Department

From: (b) (6)
To: (b) (6),

Cc: <u>Steventon, John (FAA)</u>
Subject: RE: COA login

Date: Wednesday, January 20, 2016 2:06:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png

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From: Reyes-Garcia, Dina (FAA)

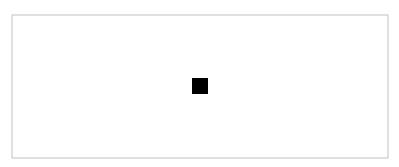
Sent: Tuesday, January 19, 2016 8:05 PM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: COA login

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, January 19, 2016 11:36 AM

To: Reyes-Garcia, Dina (FAA)

Subject: COA login

Hello,

My name is Clayton Cross, with the Wayne County Sheriff's Office. We have recently purchased a Phantom 3 Drone from DJI. It is a small white quad copter with gold stripes and a 12 mp camera. We hope to use this drone to aid with air support while serving warrants, hostage situations, crime scene investigations, and other needs of the Sheriff's Office.

I was given your info and told to email you to get access to the COA website. The county lawyer is drafting a declaration letter the I can send when he is done. Please let me know if there is anything else you need or where I can go from here.

Thank you

(b) (6), (b) (7)(C)

Wayne County IT 1016 Andrew Jackson Dr. Waynesboro TN, 38485

(b) (6), (b) (7)(C)

From: (b) (6)

To: (b) (6), (b)

Cc: Steventon, John (FAA)

Subject: RE: COA Registration

Date: Tuesday, January 19, 2016 9:49:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

image001.png

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Air Traffic and Law Enforcement (b) (6)
Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, January 19, 2016 5:11 AM

To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); (b) (6)

Subject: RE: COA Registration

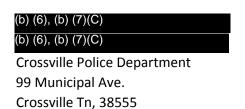
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From: (b) (6), (b) (7)(C)

Sent: Thursday, January 14, 2016 4:05 PM

To: Reyes-Garcia, Dina (FAA) Subject: COA Registration My Department is purchasing a DJI Inspire 2 quad copter UAS with FLIR. We plan to deploy the unit for search and rescue purposes, Over watch for search warrant services with our swat team, and later on crime and crash scene mapping. We have a large population of retirees in the area and some become lost and confused and a UAS would be ideal for locating the lost elderly citizens. We also have a juvenile detention facility that has a high rate of escaped delinquents. The search and rescue aspect of the UAS would be very beneficial to our department. Thank you for your time and consideration.



(b) (6), (b) (7)(C)

From: (b) (6

To: Reyes-Garcia, Dina (FAA); (b) (6), (b)

Cc:Steventon, John (FAA)Subject:RE: COA Username

Date: Tuesday, January 19, 2016 9:55:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png image002.jpg

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Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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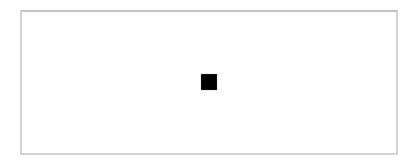
Sent: Tuesday, January 19, 2016 5:18 AM

To: (b) (6), (b) (7)

Cc: Rigol, Henry (FAA); (b) (6)

Subject: RE: COA Username

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Sent: Thursday, January 14, 2016 10:04 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** COA Username

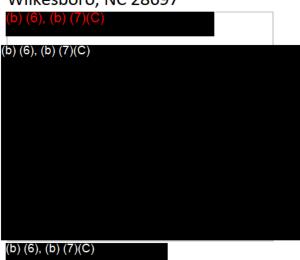
- 1. Wilkes County Sheriff's Office (Wilkes County, NC)
- 2. DJI Inspire 1 quad copter small drone.
- 3. The drone will be used in Wilkes County, NC for search and rescue operations, tactical response, aerial crime scene photographs and other law enforcement or emergency services operations. The drone will be operated by small number of operators who have been trained in its use. We will have specific guidelines for its use including altitude maximums, location consideration, and all other FAA regulations governing its use. All incidents of the drones usage will be documented and recorded within our records system.

Thanks for your help.

(b) (6), (b) (7)(C)

Wilkes County Sheriff's Office 381 Executive Dr

Wilkesboro, NC 28697



Fax 336-651-8990

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6), (b)

Cc: <u>Steventon, John (FAA)</u>

Date: Tuesday, January 19, 2016 10:00:00 AM

Attachments: Aircraft Registration.docx

RE: COA

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png image002.jpg

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, January 19, 2016 5:23 AM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: COA

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From: (b) (6), (b) (7)(C)

Sent: Wednesday, January 13, 2016 5:16 PM

To: Reyes-Garcia, Dina (FAA)

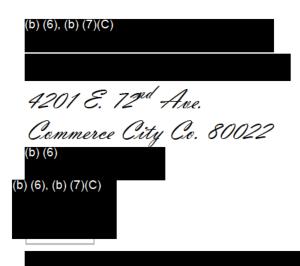
Subject: COA

Hello Ms. Dina Reyes-Garcia I spoke with (b) (6). (b) (7) today about a COA on an Unmanned aircraft (DRONE). Apparently I am in need of applying for a COA and it is necessary for me to set up an account.

The information requested of me is as follows.

Public Entity Adams County Sheriff's Office 330 N 19th Ave, Brighton Co 80106 Description of UAS Make DJI Model Phantom 3 Drone.

The concept of operation. The DJI drone unit would be utilized by the Adams County Sheriff's Office for the purpose of documentation of crime scene and other general law enforcement purposes. The drone would be used to aid in documentation of a specific are located within Adams County and operated well under the current FAA regulations regarding airport and height requirements.



 From:
 (b) (6)

 To:
 (b) (6), (b)

 Cc:
 Moorman, Patrick (FAA)

Subject: RE: LEA presentation

Date: Monday, January 11, 2016 10:31:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc



Below is the latest information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at. And we do approve night operations so long as the agency provides a safety case for night operations (in the 8900.1) and the aircraft has the appropriate lighting.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and

evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
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 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

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 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
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 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Sunday, January 10, 2016 10:23 AM

To: (b) (6)

Cc: Moorman, Patrick (FAA)
Subject: LEA presentation

(b) (6)

(b) (6), (b) (7)(C) have been asked to give a LEA UAS presentation to the New York State Sheriff's Association on Jan 27 in Albany. I'm just checking that the attached FAA/DOJ MOU is still current guidance. It's from 2013, and mentions daylight only. Just wondering if that, and anything else has changed.

Thanks for your help,





From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Date: Friday, January 08, 2016 9:09:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6_.

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message----

From: 9-AFS-UAS-Inquiries (FAA) Sent: Friday, January 08, 2016 6:07 AM

 $T_{O:}$ (b) (6), (b) (7)(C)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Regards,

(b) (6), (b) (7)

FAA UAS Integration Office

www.faa.gov/uas

From: (b) (6), (b) (7)(C)

Sent: Thursday, January 07, 2016 1:57 PM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

Can you please advise the level of training that is being required to fly a UAV in a law enforcement capacity using a COA.

Thank you for your help.

From: (b) (6) To: (b) (6), (b)

Cc: (b) (6), (b) (7)(C)

Subject: RE: San Diego County Sheriff"s Department COA/Licensing Inquiry

Date: Wednesday, January 13, 2016 1:16:00 PM
Attachments: CityCountyState LEA Intro Broad Area COAs.docx

Aircraft Registration.docx
Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b)

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The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (6) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Wednesday, January 13, 2016 10:07 AM

 $T_{O:}$ (b) (6)

Cc: (b) (6), (b) (7)(C)

Subject: San Diego County Sheriff's Department COA/Licensing Inquiry

(b)

We just spoke on the phone about possible the "Broad Area Safety COA". Could you please keep me appraised on the status of this. We are looking at presenting to our Sheriff ASAP and we would like the most current information.

Can I also get the information for the FAA Emergency Network so we can make inquiries in the future.

Thank you

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6),

Cc: 9-AFS-UASRegistration (FAA); Steventon, John (FAA)

Subject: RE: UAS registration

Date: Monday, February 08, 2016 4:32:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc



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 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
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 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

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Respectfully,

(b) (6), (b) (7)(C)

Air Traffic and Law Enforcement (b) (6), Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6), (b) (7) (C)

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From: 9-AFS-UASRegistration (FAA)

Sent: Monday, February 08, 2016 1:03 PM

To: (b) (6),

Cc: (b) (6)

Subject: RE: UAS registration

My apologies, I had confused two things. For registration, you do not need proof. However, for operational authorization (which would be a Public Certificate of Authorization or Waiver [COA]) you will need to prove that you are a public agency.

I've included (b) (6) on this email, as he will be able to answer any of your questions regarding the public COA process.

Regards.

FAA UAS Integration Office

From: (b) (6), (b) (7)(C)

Sent: Monday, February 08, 2016 3:28 PM

To: 9-AFS-UASRegistration (FAA) **Subject:** RE: UAS registration

I hope this is my last question. What would meet your requirements for proof? Ex. W-9 tax document, Department letterhead with a signature from the Chief of Police, etc.?

Thank you so much!

From: 9-AFS-UASRegistration@faa.gov [mailto:9-AFS-UASRegistration@faa.gov]

Sent: Monday, February 08, 2016 10:16 AM

To: (b) (6), (b) (7)(C)

Subject: RE: UAS registration

Thank you for your inquiry. Yes, if you go through the paper registration, your fees are waived, although you must provide proof that you are a public agency.

However, you still need to register each UAS separately. Each UAS requires a separate form.

Regards,

UAS Integration Office

From: (b) (6), (b) (7)(C)

Sent: Monday, February 08, 2016 3:04 PM

To: 9-AFS-UASRegistration (FAA) **Subject:** RE: UAS registration

I spoke with someone at the FAA that informed me that the fees are waived because government is exempt. Is that accurate? If not, is the fee \$5 for each aircraft?

From: 9-AFS-UASRegistration@faa.gov [mailto:9-AFS-UASRegistration@faa.gov]

Sent: Monday, February 08, 2016 10:00 AM

To: (b) (6), (b) (7)(C)

Subject: RE: UAS registration

Thank you for your inquiry. You can register them to whomever owns them, which I assume would be the department. Each UAS needs a separate registration and all need to be registered.

As for payment, it needs to be in the form of check or money order.

Regards,

UAS Integration Office

From: (b) (6), (b) (7)(C)

Sent: Wednesday, February 03, 2016 7:55 PM

To: 9-AFS-UASRegistration (FAA)

Cc: (b) (6),

Subject: UAS registration

Hello,

I am starting the process to register three police department owned UAS'. All units will be used in government operations within US airspace and weighs less than 55lbs. I want to make sure that I submit an accurate registration form and have some questions that I need answered.

Can I register the UAS to the department or does it need to be registered to the agency head/designee?

Do I need to register each unit separately?

If not, does it matter which unit (of the three) I register?

Will the FAA accept a purchase order from our agency for payment of the registration fee? Your assistance is greatly appreciated.

(b) (6), (b) (7)(C)

Kaua`i Police Department Criminal Intelligence Unit

3990 Kaana Street Suite 200 Lihue, HI 96766 (b) (6), (b) (7)(C)
 From:
 (b) (6)

 To:
 (b) (6), (b)

 Cc:
 Steventon, John (FAA)

 Subject:
 RE: Winslow Twp police

Date: Monday, January 25, 2016 10:30:00 AM

Attachments: <u>AC 91-57A.pdf</u>

Aircraft Registration.docx Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

(b) (6), (b)

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When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft

owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
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From: (b) (6), (b) (7)(C)

Sent: Monday, January 25, 2016 7:21 AM

To: (b) (6)

Subject: Winslow Twp police

Hi. This is my work email

Sent using **CloudMagic**

From: (b) (6)
To: (b) (6), (b) (7)
Cc: Neylon, John (FAA)

Subject: Cape Girardeau County Sheriff"s Office (MO) UAS Operations

Date: Wednesday, January 27, 2016 4:21:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, January 27, 2016 12:32 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Request for access to the Public Agency COA application Process Web Portal

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Monday, January 25, 2016 3:35 PM

To: Reyes-Garcia, Dina (FAA)

Subject: Request for access to the Public Agency COA application Process Web Portal

Ms. Garcia,

Our Office would like to request access to the online web page portal to apply for a Public Agency C.O.A. I would be the contact person and I am also a FAA Licensed Private Pilot-Airplane Single Engine Land. I was advised by the help desk on the FAA webpage for C.O.A. applications to contact you as follows:

<u>Dina.Reyes-Garcia@faa.gov</u> is the on-line COA administrator and will provide you with the necessary credentials needed for the system access. Please e-mail her the following for her to provide you with a COA username:

- 1. The name of the public entity
- 2 Small description of the UAS
- 3. The concept of the operation (a paragraph will suffice)

Information as requested

1

Cape Girardeau County Sheriff's Office 216 N. Missouri Street Jackson, Missouri 63755 Main: 573-243-3551

(b) (6), (b) (7)(C)

Fax: 573-204-2927

2.

Our UAS equipment is an

Inspire 1 version 2.0, T-600 Quad-copter manufactured by DJI a Hong Kong Company http://www.dji.com/product/inspire-1/info

Weighing 2935 grams or 6.47 pounds including the on-board battery Carrying a Zenmuse X3 Camera capable of 4k HD video and 12mb still images

3.

Our planned U.A.S. operation would be to support our ongoing Law Enforcement mission by providing an aerial option never before achievable by smaller departments with budgets that can not afford rotary or fixed wing aircraft. Our planned use would be to support Search and Rescue of lost/missing persons, fugitive manhunts, outdoor crime scene evidence video and

photographs, natural disaster recovery efforts etc. (We have frequent serious flooding as we are located on the Mississippi River. We also have frequent tornado activity being in the midwest)

Looking forward to hearing from you, Thank You

(b) (6), (b) (7)(C)

Cape Girardeau County Sheriff's Office 216 N. Missouri Jackson, Missouri 63755

(b) (6), (b) (7)(C)

From: (b) (6) To: (b) (6), (b) (7)

Cc: Steventon, John (FAA)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Date: Tuesday, January 26, 2016 12:55:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

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The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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(b) (6), (b) (7)(C)

Sent: Tuesday, January 26, 2016 12:08 PM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

Our sheriff's office is considering using a DJI Phantom 3 to assist in search and rescue missions. I was wanting to find out what forms or certification we might need through the FAA to meet regulation. Thank (b) (6), (b) (7)(C) Cherokee County Sheriff's Office S.C.

From: (b) (6)
To: (b) (6)

Cc: Steventon, John (FAA)

Subject: Introduction letter Celina Police Department (TX)

Date: Thursday, February 18, 2016 1:21:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

(b) (6)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

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(b) (6)

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, February 17, 2016 2:29 PM

(b) (6), (b) (7)

Cc: Pansky, Steven CTR (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to learn more on COAs and the COA process.

----Original Message----

From: (b) (6), (b) (7)(C)

Sent: Wednesday, February 17, 2016 10:43 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

- 1) Agency requesting COA is the Celina Police Department in Celina Texas.
- 2) The UAS is a small Phantom made by DJI that has a range of about 1 mile and is controlled by remote and line of sight.
- 3) The concept of operation is for public safety and used in accordance with accident investigations, fleeing felon apprehension, missing person locating, fire suppression, etc.

Thanks in advance.

(b) (6), (b) (7)(C)

Celina Police Department 501 E Pecan St. Celina, TX 75009

(b) (6), (b) (7)(C)

FAX: 972.382.3879 www.celina-tx.gov



-----Original Message-----

From: 9-AJV-115-UASCOA@faa.gov [mailto:9-AJV-115-UASCOA@faa.gov]

Sent: Tuesday, February 16, 2016 9:24 PM

 $T_{O:}$ (b) (6), (b) (7)(C)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

Please submit to dina.reyes-garcia@faa.gov.

Once you provide this information, you will be assigned to a Specialist who will assist you with any questions and the COA process.

-----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Wednesday, December 09, 2015 2:22 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

How do I go about getting online access to complete the Certificate of Waiver / Authorization?

From: To: Cc: Steventon, John (FAA)

Subject: Introduction letter City of Jackson (MI) Date: Thursday, February 18, 2016 12:50:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

b) (6), (b)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, February 17, 2016 2:24 PM

 T_0 : (b) (6), (b) (7)(C)

 $Cc: \overline{(b)} \overline{(6)}$

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to (b) (6), (b) (7)(C), who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to learn more on COAs and the COA process.

----Original Message----

From: (b) (6), (b) (7)(C)

Sent: Wednesday, February 17, 2016 8:41 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

Good Morning,

The City of Jackson, Michigan, a Michigan Municipal Corporation, is interested in using Unmanned Aircraft Systems for law enforcement/code enforcement purposes.

Please let me know what steps the City needs to take to do so.

Thank you,

(b) (6), (b) (7)

Office of the City Attorney

City of Jackson 161 W. Michigan Ave. Jackson, MI 49201 (b) (6), (b) (7)(C) 866-971-2117 (fax) (b) (6), (b) (7)(C) From: (b) (6)
To: (b) (6), (b)
Cc: Steventon, John (FAA)

Subject: Introduction letter Grant County Sheriff"s Office (WA)

Date: Thursday, February 18, 2016 8:43:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b)

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Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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----Original Message---From: (b) (6), (b) (7)(C)
Sent: Wednesday, February 17, 2016 9:06 AM
To: (b) (6)
Subject: Correct email

(b) (6)

I apologize but I sent you the original email from my personal account. Please reply to and for future communication use (b) (6), (b) (7)(C)

Thanks!

Sincerely,

(b) (6), (b) (7)
Grant County Sheriff's Office
35 C St NW
Ephrata, WA
(b) (6), (b) (7)(C)

Sent from (b) (6)

My name is (b) (6), (b) (7) with the Grant County Sheriff's Office in Ephrata, WA. I'm am (b) (6), (b) (7)(C) for our office and have been charged with obtaining our COA. Matt Gammon with your Technical Systems Division in Renton, WA referred me to you.

I had called and left you a message with my contact information. If you would, please forward me the information and instructions for applying for the COA, as I would like to start that process as soon as possible.

I appreciate the assistance and look forward to hearing from you.

Sincerely,

(b) (6)

(b) (6), (b) (7) Grant County Sheriff's Office 35 C St NW<x-apple-data-detectors://0/1> Ephrata, WA 98823<x-apple-data-detectors://0/1> (b) (6), (b) (7)(C) > (b) (6), (b) (7)(C)

Sent from my iPad

From: (b) (6)

To: (b) (6)

Cc: Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Date: Friday, January 29, 2016 3:40:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

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----Original Message-----

From: 9-AFS-UAS-Inquiries (FAA) Sent: Friday, January 29, 2016 12:21 PM

 $T_{0:}$ (b) (6)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Regards,

(b) (6)

FAA UAS Integration Office www.faa.gov/uas

From: (b) (6)

Sent: Thursday, January 28, 2016 2:59 PM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

My department is looking into getting a UAV and I am looking for information on the process and regulations that apply.

From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: <u>Steventon, John (FAA)</u>

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Wednesday, February 17, 2016 3:41:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

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-----Original Message-----From: 9-AJV-115-UASCOA (FAA) Sent: Tuesday, February 16, 2016 6:26 PM To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

-----Original Message-----From: (b) (6), (b) (7)(C)

Sent: Friday, December 04, 2015 8:50 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

The Monroe County Sheriff's Office (Ohio) wishes to apply for a COA to operate a UAS for law enforcement purposes. Please contact (b) (6) at (b) (6) or (b) (6), (b) (7)(C) to get this process started

Thank You

From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: <u>Brunner, Alvin A (FAA)</u>; <u>Steventon, John (FAA)</u>

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Wednesday, February 17, 2016 3:47:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

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The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
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Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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----Original Message----

From: 9-AJV-115-UASCOA (FAA) Sent: Tuesday, February 16, 2016 7:04 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----From (b) (6), (b) (7)(C)

Sent: Monday, December 07, 2015 1:51 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:
---original message to Alvin Brunner

Mr. Brunner, Parker County (b) (6), (b) (7)(C) asked me to contact you to see what Parker County Sheriffs Office needs for compliance in operating a Drone. The Drone was acquired earlier this year and is ready for deployment. Sheriff Fowler asked me to obtain the necessary license or requirements for this to occur.

Respectfully,

(b) (6), (b)

Weatherford/Parker County Special Crimes Unit

(b) (6), (b) (7)

From: (b) (6)

To: (b) (6)

Cc: Steventon, John (FAA)

Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Thursday, February 18, 2016 1:55:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, February 17, 2016 3:02 PM

 T_0 : (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to learn more on COAs and the COA process.

----Original Message----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, February 16, 2016 11:05 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

My name is (b) (6), (b) . I'm the (b) (6), (b) (7) for the Riviera Beach, FL Police Department. We wish to being the COA/Waiver process in order to begin operating an unmanned aerial vehicle within our jurisdiction.

Thanks



From: (b) (6)
To: (b) (6), (b) (7) (C)
Cc: Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Thursday, February 18, 2016 2:12:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

(b) (6),

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, February 17, 2016 3:14 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Monday, February 15, 2016 4:32 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

California State Fair Police is a Law Enforcement Agency. We are looking to start an "UA" program. To get started I found we need a "Letter of declaration" from the State Attorney. Where do I find what goes in the letter and where do we send it?

Thank you

(b) (6), (b) (7)(C)

California State Fair Police

From: (b) (6)
To: (b) (6),

Cc: Steventon, John (FAA)

Subject: RE: Agency UAS 1- Davidson County Sheriff's Office (Davidson County, NC)

Date: Monday, February 22, 2016 10:20:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png

(b) (6), (b)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

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(b) (6)

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From: Reyes-Garcia, Dina (FAA)

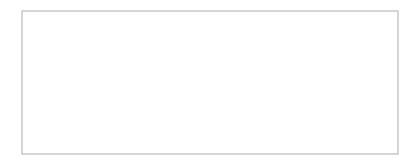
Sent: Monday, February 22, 2016 6:36 AM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: Agency UAS

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Friday, February 19, 2016 3:30 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** Agency UAS

Dina,

I was asked in an email to send this information to you. Our county attorney is drafting a letter like the request states. Please let me now the next step. Attached is a picture of the drone and a copy of our Agency SOP.

- 1- Davidson County Sheriff's Office (Davidson County, NC)
- 2- Chroma Camera Drone
- 3- Search and Rescue/ Aerial recon of fleeing criminals

(b) (6), (b) (7)(C) **Day (150) 150 (11) Y Sheriff's Office**(b) (6), (b) (7)(C)

If you are not the intended recipient, you must destroy this message and inform the sender immediately. This electronic mail message and any attachments, as well as any electronic mail message(s) sent in response to it may be considered public record and as such subject to request and review by anyone at any time. It also may contain information which is confidential within the meaning of applicable federal and state laws.

Davidson County Government, PO Box 1067, Lexington, NC, USA, www.co.davidson.nc.us

From: (b) (6)
To: (b) (6).

Subject: RE: COA Dale County Sheriff"s Office (AL)

Date: Monday, February 08, 2016 12:31:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc



Mr. Rigol sent you the information below back in October 2015 but just in case that email got misplaced here in the introduction information again including the public declaration attachment information.....

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From: (b) (6), (b) (7)(C)

Sent: Monday, February 08, 2016 7:29 AM

To: (b) (6)

Subject: COA

Sir per our phone conversation this morning I am requesting the info from you so our office Dale County Sheriff's Office, located in Alabama may apply for a COA.

My email is: (b) (6), (b) (7)(C)

Thank you in advance for your help in this matter.

Stay Safe (b) (6), (b) (b) (6), (b) (7)(C)
 From:
 (b) (6)

 To:
 (b) (6), (b) (7)

 Cc:
 Steventon, John (FAA)

 Subject:
 RE: COA Request

Date: Tuesday, February 23, 2016 12:24:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, February 23, 2016 9:15 AM

To: (b) (6), (b) (7)(C)

Subject: COA Request

(b) (6), (b) (7)(C)

St. Bernard Parish Sheriff's Office (b) (6), (b) (7)(C)

www.sbso.org

From: (b) (6)
To: (b) (6),

Cc: Steventon, John (FAA)

Subject: RE: COA Waiver Application Request

Date: Thursday, February 18, 2016 4:23:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png

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 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
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describes the COA process and an example of the application.

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Eliaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, February 18, 2016 12:46 PM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: COA Waiver Application Request

Thank you. Your case has been assigned to (b) (6) who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Thursday, February 18, 2016 1:12 PM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6), (b) (7)(C)

Subject: COA Waiver Application Request

Dear Ms. Reyes-Garcia,

from CGH Technologies forwarded me your email address and explained that you are the one to get in touch with in regards to starting the Certificate of Authorization Waiver application process and obtaining OE/AAA login credentials. I would like to express that I am pleased to be moving things forward finally, since it seems as though I have been going around in circles trying to figure out the process for the past several weeks.

We here at the Perkins County Sheriff's Office in rural western Nebraska are looking to implement an Unmanned Aerial System Program into the public safety service we provide for our constituents. I have been tasked by Sheriff James Brueggeman to learn more about what we need to do to in order to be in compliance with the FAA's guidelines. We may likely be one of the first agencies in Nebraska to attempt such an undertaking, so I do not have any precedent guidance to follow.

We would be primarily interested in using our already-purchased UAS, which is the popular DJI Phantom 3 Professional quadcopter. You may already be familiar with such a platform, but if you have questions, please let me know.

The implementation of the program is designed to enhance our photo-documentation capabilities and our observational awareness for special purposes. It is not intended to replace basic patrol operations. These special purposes would include but may not be limited to: traffic accident investigations, search and rescue operations, crime scene investigations, warrant service operations, interagency fire and rescue support, disaster responses, and targeted surveillance operations.

I look forward to hearing back from you at your soonest convenience. It is my understanding that the process takes several months if not years, so I would like to get the process started as soon as possible. Thank you in advance for your attention to this matter, and if you have any questions, please do not hesitate to contact me via my cell phone (b) (6), (b) (7)(C) or any of the methods listed below.

Respectfully,

(b) (6), (b) (7)(C)

Perkins County Sheriff's Office 200 Lincoln Avenue Grant, Nebraska 69140 (b) (6), (b) (7)(C)

Perkins County, Nebraska

(b) (6), (b) (7)(C)

200 Lincoln Avenue; PO Box 607

From: (b) (6)
To: (b) (6).

Cc: <u>Steventon, John (FAA)</u>

Subject: RE: Contact Information - (b) (6)

Date: Thursday, February 04, 2016 8:55:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

Good Morning. As an introduction, I am a contractor with (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be

able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Thursday, February 04, 2016 5:52 AM

To: (b) (6)

Subject: Contact Information - Sumter Police Department, South Carolina

Good morning sir and thank you again for the information concerning our desire to operate a drone for police operations. I can be reached with by this email address or (b) (6), (b) (7)(C)

Respectfully,

(b) (6), (b) (7)(C)

Sumter Police Department

From: (b) (6)
To: (b) (6), (b)
Cc: Chew, Byron (FAA)

Subject: RE: Law Enforcement Requirements to Operate a Drone

Date: Tuesday, February 09, 2016 8:12:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

Greg-

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(b) (6)

Air Traffic and Law Enforcement (b) (6)

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Chew, Byron (FAA)

Sent: Monday, February 08, 2016 3:31 PM

To: (b) (6), (b) (7)

Cc: Pansky, Steven CTR (FAA)

Subject: RE: Law Enforcement Requirements to Operate a Drone

Hello (b)

(b) (6), (b) (7)(C)

is the POC for law enforcement COAs. He will be able to assist you.

Byron Chew "Chewy"

Manager

Tactical Operations Team

FAA Western Service Center Operations Support Group (AJV-W23) 1601 Lind Ave SW Renton, WA 98057 (425) 203-4550 Office

(425) 282-9563 Cell byron.chew@faa.gov

From: (b) (6), (b) (7)(C)
Sent: Monday, February 08, 2016 7:37 AM

To: Chew, Byron (FAA)

Subject: Law Enforcement Requirements to Operate a Drone

Hi Byron. Where can I research to find the requirements a police department must follow in order to operate a drone?

(b) (6), (b) (7)

Brea Police Department.

From: (b) (6)
To: (b) (6).

Cc: Steventon, John (FAA)

Subject: RE: Law Enforcement UAS

Date: Wednesday, January 27, 2016 8:26:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

(b) (6),

Not sure why your interest was not forwarded to me through the FAA web page. As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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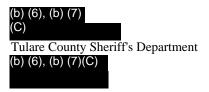
-----Original Message----From: (b) (6), (b) (7)(C)

Sent: Tuesday, January 26, 2016 4:14 PM
To: (b) (6)
Cc: (b) (6), (b) (7)(C)

Subject: Law Enforcement UAS

(b) (6). (b) with the Tulare County Sheriff*s Office located in Central California. I was given your contact information by the Ventura County Sheriff*s Office as a contact for assistance with starting the process of obtaining a COA for limited use of a UAS by our agency. I understand we need a application number before filling out the actual application. I have filled out the online interest card on the FAA*s UAS page several times over the last several months and have not received any follow-up contact. I understand the UAS rules have been in flux and that probably contributed to the delay in responding, but was hoping you could give me some helpful direction. Any guidance would be greatly appreciated. Thank you in advance and I look forward to hearing from you.

Respectfully,



Primus Inter Pares

From: (b) (6)
To: (b) (6), (b) (7)(C)
Steventon John (FAA)

Cc: <u>Steventon, John (FAA)</u>

Subject: RE: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov (b) (6)

Date: Wednesday, February 17, 2016 4:17:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

(b) (6)

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Friday, February 12, 2016 5:09 PM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

My city would like to use a drone to survey storm damage to cliffs.

I understand we need to register the UAS and have a COA. Is there anything else we need?

Regards,

(b) (6), (b) (7)

Pacifica, CA Police Department

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov Jackson County Sheriff"s Office (WI)

Date: Thursday, February 18, 2016 4:45:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b)

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Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Thursday, February 18, 2016 1:27 PM

(b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

 $F_{rom}(b)$ (6), (b) (7)(C)

Sent: Thursday, February 18, 2016 3:35 AM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

Hello, my name is (b) (6), (b) (7)(C) , and I am attempting to begin the COA process for the Jackson County Sheriff's Office UAV program. I am inquiring as to what the process, and or first step is. My email is

(b) (6), (b) (7)(C)

Thank you for your help.

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: <u>Steventon, John (FAA)</u>

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov Johns Creek (GA) Police Department

Date: Wednesday, February 17, 2016 3:52:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b)

Johns Creek Police Department

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(b) (6)

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-----Original Message-----From: 9-AJV-115-UASCOA (FAA) Sent: Tuesday, February 16, 2016 7:19 PM To (b) (6), (b) (7)(C)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to Mr. Steve Pansky, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to learn more on COAs and the COA process.

----Original Message----From (b) (6), (b) (7)(C)

Cc: (b) (6)

Sent: Tuesday, December 08, 2015 1:09 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

Our city police department, Johns Creek Georgia, would like to obtain a COA for a "drone" we are purchasing. Could you please assist in this process? Thank you, (b) (6), (b) (7), Johns Creek Police Department

From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov Los Angeles County Sheriff"s Department (CA)

Date: Friday, February 19, 2016 8:31:00 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector, we handle law enforcement/fire and first responder Agency UAS requests.

The short answer to your question is yes. Public Safety Agencies can operate within urban areas however they will need to establish what we refer to as a defined operating area (perimeter) that will be controlled by the proponent to ensure the safety of persons and property while the UAS is operating within the area. We also have some restrictions on the operating area based on the location of the event in relation to manned aviation activities at airports.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, First Responder Agency small UAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully

admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The

FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6) Senior Aviation

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Thursday, February 18, 2016 2:16 PM

 T_0 (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message----

From: (b) (6), (b) (7)(C)

Sent: Wednesday, February 10, 2016 5:45 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www faa.gov/uas/public operations/

Message:

Is Governmental drone use allowed for populated areas by a municipal police department? The purpose of the use would include aerial photos, video, area searches for evidence and persons. I noticed the COA process listed a restriction for populated areas. Does this include use for law enforcement purposes? Is there a person I could call to ask followup questions. I am a Police Sergeant located in Los Angeles County. Thank you. (b) (6), (b) (7)

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov New Rochelle Police Department (NY)

Date: Thursday, February 18, 2016 4:55:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6),

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA)

Sent: Thursday, February 18, 2016 1:39 PM

 T_0 : (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From (b) (6), (b) (7)(C)

Sent: Friday, February 12, 2016 4:32 PM

To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

New Rochelle Police Department

475 North Ave.

New Rochelle, NY 10801

(b) (6), (b) (7)(C)

Please send and or email information for small 2lb drone use for law enforcement purposes.

Regards,

(b) (6), (b) (7)(C)

From: (b) (6) To: (b) (6).

Cc: Steventon, John (FAA)

Subject: RE: Public COA Application Lehigh University Police Department (PA)

Date: Friday, February 12, 2016 2:14:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Respectfully,

(b) (6_.

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: Reyes-Garcia, Dina (FAA)

Sent: Friday, February 12, 2016 8:27 AM

 $T_{O:}$ (b) (6), (b)

Cc: (b) (6)

Subject: RE: Public COA Application

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Friday, February 12, 2016 9:25 AM

To: Reyes-Garcia, Dina (FAA) Subject: Public COA Application

Hello Mrs. Reyes-Garcia,

- 1.) Our Department is Lehigh University Police Department (Fully accredited through the state of Pennsylvania)
- 2.) DJI Inspire (1)
- 3.) The DJI Inspire (1) will be used for search and rescue in our heavily would areas, crime scene photography, and threat assessment in an active shooter situation.

(b) (6), (b) (7)(C)

Lehigh University Police Department 36 University Drive

Bethlehem, PA 18015

(b) (6), (b) (7)(C)

Fax (610)758-5346

(b) (6), (b) (7)(C)

From: (b) (6)

To: (b) (6), (b) (7)

Cc: Steventon, John (FAA)

Subject: RE: Public Use UAS- Columbus Ohio Division of Police.

Date: Wednesday, February 24, 2016 2:46:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

To answer your question, the certification requirements for the pilot in command (PIC) is based on the operating location, altitude and if the operation is being conducted during the day or night. For UAS operations that will take place during daytime in Class G airspace at or below 400 feet Above the Ground under Visual Flight Rules, line of sight from the aircraft greater than 5 nautical miles from an airport or heliport, the PIC must have a minimum of having taken the FAA flight ground school course and passed the written exam. Any other operations outside of what I have denoted above will require that the PIC have as a minimum a Private Pilot License (See FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16, chapter 4, Section 16-4-1-3, B.5).

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has

been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures

- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Wednesday, February 24, 2016 8:35 AM

To: (b) (6)

Subject: Public Use UAS- Columbus Ohio Division of Police.

(b) (6)

I am a police officer with the City of Columbus, Division of Police. I am on a committee researching the use of UAS for public use. Elizabeth Swingle from out local FSDO and (b) (6), (b) (7)(C) of the Michigan State Police say your are an excellent resource for public use UAS information.

I have received conflicting information from various sources regarding the certification requirements for the flight crews conducting public use UAS operations. Can you clarify or direct me to an online resource that clarifies it?

Thank you for your time,

(b) (6), (b) (7)(C)

City of Columbus, Division of Police Technical Services Bureau (b) (6), (b) (7)(C) From: (b) (6) To: (b) (6).

Cc:Steventon, John (FAA)Subject:RE: Quad copter registration

Date: Thursday, February 18, 2016 11:52:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png image002.jpg

(b) (6),

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

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When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, February 17, 2016 12:17 PM

To: (b) (6), (b)

Cc: (b) (6)

Subject: RE: Quad copter registration

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Wednesday, February 17, 2016 12:01 PM

To: Reyes-Garcia, Dina (FAA)
Subject: Quad copter registration

Hello,

I was given you name after many calls to the FAA. Our department recently purchased a quad-copter to be used by our tactical team during special operations. Some of these operations would include armed barricaded subjects, hostage situations, and high risk search warrants. We feel it would be useful to get close to the objective location to observe windows, entry points, safety issues as well as observe the suspect (s) without putting personnel in harm's way. We have had a special process for drone operators at our department and chose 4 of them. They are to receive special training by the manufacturer of the quad-copter. We have not proceeded because we want to register it and complete what we need to through the FAA. The quad copter will have a pilot and a second observer person to operate an axis camera attached to it.

We are hoping this process will not take too long. This is a vital tool we need as soon as possible to assist us with officer safety.

My question to you is: What do we need to do on our part to comply with everything you require of us?

Thank you for any help you can give.

(b) (6)

(b) (6), (b) (7)(C)

Fugitive Apprehension Unit Supervisor

(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6), (b) (7)(C)
Co: (b) (6)

Cc: Steventon, John (FAA)
Subject: RE: Requesting information for L.E. drone program
Date: Tuesday, February 02, 2016 1:40:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

image001.jpg

Also great to speak with you. As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests. And my new phone number is 202-904-9400.

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Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Eliaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, February 02, 2016 10:15 AM

To: (b) (6)

Cc: (b) (6), (b) (7)(C)

Subject: Requsting information for L.E. drone program

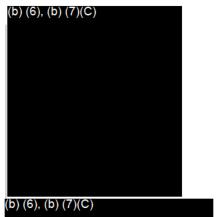
(b) (6)

It was great talking to you and thanks for providing some direction on how to start the process. This is my email address for the attachments you talked about (b) (6), (b) (7)(C)

Also, my cell number (b) (6), (b) (7)(C)

I'm looking forward in keeping in contact with you, any other questions I may have please send a contact name and phone number or email if that works best.

Thanks again and have a good day!



Maricopa County Sheriff's Office – HIDTA Special Investigations Division, EEARS Unit

(b) (6), (b) (7)(C)

Fax: (602) 437-1647

(b) (6), (b) (7)(C)

The information contained in this e-mail and any files transmitted with it are confidential and/or privileged, and are intended solely for the use of the recipients listed above. If you are not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of the transmitted information is strictly prohibited. If you have received this transmission in error, please immediately notify the sender and delete and destroy all copies and attachments.

From: (b) (6)
To: (b) (6), (b)

Cc: Steventon, John (FAA)
Subject: RE: SCPD COA

Date: Wednesday, January 27, 2016 4:26:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

image001.png

(b) (6), (b)

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Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, January 27, 2016 12:42 PM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: SCPD COA

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6), (b) (7)(C) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



(b) (6), (b) (7)(C)

Sent: Wednesday, January 27, 2016 12:04 PM

To: Reyes-Garcia, Dina (FAA)

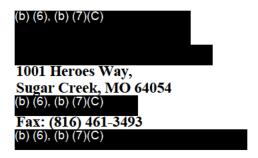
Cc: (b) (6), (b)
Subject: SCPD COA

Hello,

I am writing in attempt to receive the proper COA credentials outlined by FAA regulations. I work for the Sugar Creek Police Department, which is part of the Kansas City, MO Metro Area. We have recently purchased a DJI Phantom 3 Pro. The UAV is regularly maintained and operated by three officers in our department. Each has attended certified ground school and is proficient in operating the UAV and aware of FAA regulations. The area we are requesting to be able to operate is within are our city and the Jackson County, MO area. We hope to be able to offer assistance to other municipalities therefore we are requesting all of Jackson County.

Please advise what further action should be taken on our part.

Thanks,



- "Do what you can, with what you have, where you are."
- -Theodore Roosevelt

NOTICE-CONFIDENTIAL: This message and any attached files, in their entirety, are intended for the use of the individual and/or entity referenced above and may contain information that is privileged, confidential, and/or exempt from disclosure by applicable law or court order. If the reader of this message is not the intended recipient, please notify the sender via the most expedient means available (contact information precedes this notice.) You are hereby notified that any dissemination, distribution, or copying of this message is strictly prohibited. If you received this message in error, please delete it immediately. To be removed from this list, send an e-mail to the address below. Please leave the subject and message body blank.

This e-mail, including any files transmitted with it, is the property of the City of Sugar Creek, Missouri. It is confidential and is intended solely for the use of the individual, or entity, to whom the e-mail is addressed. If you are not the named recipient, or otherwise have reason to believe that you have received this message in error, please notify the sender at (816) 252-4400 and delete this message immediately from your computer. Any other use, retention, dissemination, forwarding, printing, or copying of this e-mail is strictly prohibited. Additionally, please be advised that (1) e-mail

communication is not a secure method of communication, (2) any e-mail that is sent to you or by you may be copied and held by various computers it passes through as it goes from me to you or vice versa, (3) persons not participating in our communication may intercept our communications by improperly accessing your computer or my computer or even some computer unconnected to either of us which the e-mail passed through. If you do not wish to receive communication via e-mail please notify the City of Sugar Creek at once. Thank you

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Reyes-Garcia, Dina (FAA); Steventon, John (FAA)

Subject: RE: UAS Operation

Date: Tuesday, February 09, 2016 8:19:00 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

image001.png

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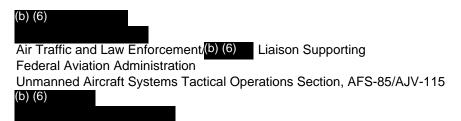
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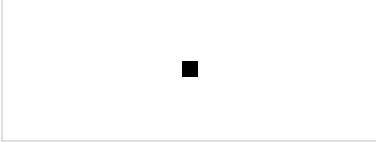
Sent: Monday, February 08, 2016 4:12 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: UAS Operation

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From: (b) (6), (b) (7)(C)

Sent: Friday, February 05, 2016 12:51 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** UAS Operation

Dina,

I received your email address from a (b) (6), (b) (7) from the Medina County Sheriff Department here in Ohio. I am looking for information in regards to operating a drone on behalf of a police department. Our agency has not yet purchased one but are looking into it. Could you please tell me what we would need to accomplish to operate a drone legally?

Thank you



The preceding e-mail message may contain information that is confidential, and may constitute non-public information. It is intended to be conveyed only to the designated recipient(s). If you are not an intended recipient of this message, please contact us by forwarding the incorrectly addressed email to adalessandro@orrville.com and destroy the original message. Unauthorized use, dissemination, distribution, or reproduction of this message is strictly prohibited and may be unlawful.

From: (b) (6)
To: (b) (6),

Cc: Steventon, John (FAA)

Subject: RE: UAS Public Declaration Letter

Date: Friday, January 29, 2016 11:15:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png

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Senior Aviation Analyst

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Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

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(b) (6), (b) (7)(C)

Sent: Friday, January 29, 2016 7:41 AM

To: (b) (6)

Subject: UAS Public Declaration Letter

To whom it may concern,

Good morning sir, I am trying to reach someone that can assist in the process of creating a public declaration letter for my agency reference UAS operations. I found your email online and was curious if you could assist? Thank you for your help!



Very Respectfully,

(b) (6), (b) (7)(C)

Special Investigations Section 2071 Ringling Blvd. Sarasota, FL. 34237



"Please Note: All mail to and from the Sarasota County Sheriff's Office is subject to the Public Records Law of Florida."

From: (b) (6)
To: (b)

Cc: 9-AFS-UASRegistration (FAA); Steventon, John (FAA)

Subject: RE: UAS registration

Date: Monday, February 08, 2016 4:32:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc



As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

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When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations

are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: 9-AFS-UASRegistration (FAA)

Sent: Monday, February 08, 2016 1:03 PM

To: (b) (6),

Cc: (b) (6)

Subject: RE: UAS registration

My apologies, I had confused two things. For registration, you do not need proof. However, for operational authorization (which would be a Public Certificate of Authorization or Waiver [COA]) you will need to prove that you are a public agency.

I've included (b) (6) on this email, as he will be able to answer any of your questions regarding the public COA process.

Regards,

FAA UAS Integration Office

From: (b) (6), (b) (7)(C)

Sent: Monday, February 08, 2016 3:28 PM

To: 9-AFS-UASRegistration (FAA) **Subject:** RE: UAS registration

I hope this is my last question. What would meet your requirements for proof? Ex. W-9 tax document, Department letterhead with a signature from the Chief of Police, etc.?

Thank you so much!

From: 9-AFS-UASRegistration@faa.gov [mailto:9-AFS-UASRegistration@faa.gov]

Sent: Monday, February 08, 2016 10:16 AM

To: (b) (6), (b) (7)(C)

Subject: RE: UAS registration

Thank you for your inquiry. Yes, if you go through the paper registration, your fees are waived, although you must provide proof that you are a public agency.

However, you still need to register each UAS separately. Each UAS requires a separate form.

Regards,

UAS Integration Office

From: (b) (6), (b) (7)(C)

Sent: Monday, February 08, 2016 3:04 PM

To: 9-AFS-UASRegistration (FAA) **Subject:** RE: UAS registration

I spoke with someone at the FAA that informed me that the fees are waived because government is exempt. Is that accurate? If not, is the fee \$5 for each aircraft?

From: 9-AFS-UASRegistration@faa.gov [mailto:9-AFS-UASRegistration@faa.gov]

Sent: Monday, February 08, 2016 10:00 AM

To: (b) (6), (b) (7)(C)

Subject: RE: UAS registration

Thank you for your inquiry. You can register them to whomever owns them, which I assume would be the department. Each UAS needs a separate registration and all need to be registered.

As for payment, it needs to be in the form of check or money order.

Regards,

UAS Integration Office

From:

Sent: Wednesday, February 03, 2016 7:55 PM

To: 9-AFS-UASRegistration (FAA)

Cc: (b) (6),

Subject: UAS registration

Hello,

I am starting the process to register three police department owned UAS'. All units will be used in government operations within US airspace and weighs less than 55lbs. I want to make sure that I submit an accurate registration form and have some questions that I need answered.

Can I register the UAS to the department or does it need to be registered to the agency head/designee?

Do I need to register each unit separately?

If not, does it matter which unit (of the three) I register?

Will the FAA accept a purchase order from our agency for payment of the registration fee? Your assistance is greatly appreciated.

(b) (6), (b) (7)(C)

Kaua`i Police Department Criminal Intelligence Unit

3990 Kaana Street Suite 200 Lihue, HI 96766

(b) (6), (b) (7)(C)

Fax :(808) 241-1879 (b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: Benton Police Department OR Introduction letter information

Date: Thursday, March 10, 2016 11:15:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

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I am sorry to say I have not received a letter from the City of Benton, OR nor do I have any record of any communication with your department on your agency's desire to setup an unmanned aircraft program. Would you please email me a copy of the Public Declaration letter and I will start the coordination process on that document.

Since I have no record of speaking with you department below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at. I apologize if you already have this information.

++++++++++++++

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aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance. Once I have processed your Public declaration letter and it is deemed sufficient I will set you up for access to the on line application program.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: 9-AFS-UAS-Inquiries (FAA)

Sent: Tuesday, March 08, 2016 6:24 AM

 $T_{0:}$ (b) (6)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

(b) (6)

I believe this is yours?

Thanks,



Regards,

(b) (6)

FAA UAS Integration Office

www.faa.gov/uas

From: (b) (6), (b) (7)(C)

Sent: Tuesday, March 08, 2016 7:41 AM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:
-----Good Morning,

I wanted to check on the status of our certificate of use for our police agency, the Benton Police Department in Benton, AR. We sent in the required letter from our city attorney and mayor last September and have yet to hear anything back on it to date. Any help you can provide would be appreciated.

Thank You,

(b) (6), (b) (7)(C)

Benton Police Department 114 S. East St., Suite 100 Benton, AR 72015 (b) (6), (b) (7)(C) From: To: (b) (6), (b) (7)(C) Cc: Steventon, John (FAA)

Subject: FW: Public COA City of Sikeston Department of Public Safety

Date: Tuesday, May 03, 2016 10:51:00 AM Attachments: Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link

(see http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available

for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
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(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Wednesday, April 27, 2016 3:44 PM

To: Reyes-Garcia, Dina (FAA)

Subject: Public COA

Good afternoon,

I am sending this email to you in reference to obtaining a Public COA for drone usage. Below is our information:

Name of Entity: City of Sikeston Department of Public Safety

UAS description:

DJI Inspire Pro (black)

Concept of operations: The City of Sikeston Department of Public Safety will use the UAS for the purposes of aerial photography of accident/crime scenes, search and rescue missions, location security/monitoring, firefighting operations (visual aid), and other areas in which a UAS would be beneficial for the overall public safety. This UAS will be owned by the municipality, and operated by department staff.

If you have any questions, you can email me at (b) (6), (b) (7)(C)



Thanks for your assistance in this matter,

(b) (6), (b) (7)(C)

Sikeston Department of Public Safety Sikeston, Missouri

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: Intro letter for operating a UAS in NAS Hawkins County (TN) Sheriff"s Office

Date: Friday, February 26, 2016 3:43:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6),

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations

are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(D) (D)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: (b) (6)

To: (b) (6), (b)

Cc: Steventon John (FAA)

Cc: <u>Steventon, John (FAA)</u>

Subject: RE: Access to the UAS COA Online System
Date: Tuesday, March 15, 2016 1:51:00 PM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

(b) (6), (b)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

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 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Thomas, Tamisha (FAA)

Sent: Friday, March 11, 2016 12:38 PM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: Access to the UAS COA Online System

Good Afternoon (b) (6), (b) (7)(C)

Your request for access to UAS COA Online System will be handled by (b) (6) He is cc:ed on this request.

Thanks.

Tamisha L. Thomas
Management and Program Analyst
Mission Support Services
UAS Tactical Operations Section, AJV-115

Phone: 202-267-9113

Email: tamisha.thomas@faa.gov

"Challenges are what make life interesting and overcoming them is what makes life meaningful." - Joshua J. Marine

From: (b) (6), (b) (7)(C)

Sent: Friday, March 11, 2016 10:38 AM

To: Thomas, Tamisha (FAA)

Subject: Access to the UAS COA Online System

Good Morning Tamisha,

(b) (6), (b) (7)(C) with CGH Technologies Inc., has provided me your contact information in order to gain access to the UAS COA online system in order to apply for a COA for the Calera Police Department. The Calera Police Department is a municipal government entity operates within the jurisdiction of the City of Calera, Shelby County, Alabama.

Our department has recently purchased a DJI Phantom 3 that is equipped with an integrated camera system that can be used for photography as well as videography. This UAS will be used to assist our crime scene technicians and traffic homicide investigators with documenting their respective scenes. We also have nine miles of interstate within our jurisdiction that have Hazmat trucks traversing it daily as well as numerous miles of railroad tracks that also have tanker cars that also carry Hazmat. In the event of a Hazmat spill the UAS will be highly beneficial in identifying the type of spill as well as the magnitude of the damage without having to put a first responder in danger of serious bodily injury and possibly death.

Respectfully,

(b) (6), (b) (7)(C)

Criminal Investigation Division Calera Police Department 10947 Hwy 25 Calera, AL 35040

(b) (6), (b) (7)(C) Fx: (205) 668-3835 (b) (6), (b) (7)(C) From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: RE: COA Online System Access Lubbock Police Department TX

Date: Monday, April 04, 2016 2:39:00 PM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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are eligible for registration and operation. You can either register your aircraft by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. You can also register your aircraft using the paper link or going to http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 200 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other

assistance) Basically, this is a .. "What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Broad Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this broad area expanded operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

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From: Reyes-Garcia, Dina (FAA) Sent: Friday, April 01, 2016 8:37 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: FW: COA Online System Access

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

Dina Reyes-Garcia
Management and Program Analyst
COA Online Administrator
Federal Aviation Administration
UAS Emerging Technologies (AJV-115)

Phone: 202-267-8038

Email: dina.reyes-garcia@faa.gov

From: (b) (6)

Sent: Monday, March 28, 2016 4:15 PM

To: Reyes-Garcia, Dina (FAA)

Subject: FW: COA Online System Access

Thanks,

Tamisha L. Thomas Management and Program Analyst Mission Support Services UAS Tactical Operations Section, AJV-115

Email: <u>tamisha.thomas@faa.gov</u>

"Challenges are what make life interesting and overcoming them is what makes life meaningful." - Joshua J. Marine

From: (b) (6), (b) (7)(C)

Sent: Monday, March 28, 2016 4:14 PM

To: Thomas, Tamisha (FAA)

Subject: COA Online System Access

Good afternoon,

My name is (b) (6), (b) (7)(C) , I'm with the Lubbock Police Department (TX). We are currently in the beginning stages of attempting to apply for a COA. Nick Allison with the OE/AAA Support Desk advised me to contact you for access. We are wanting use a DJI Inspire 1 (quadrotor) for aerial photography, aerial videography, Crime Scene searches and other lawful LE related duties. Please advise if any further information is required to gain access to the online system.

Thanks,

(b) (6), (b) (7)(C)

Lubbock Police Department Investigation Division Identification Section

(b) (6), (b) (7)(C) (b) (6), (b) (7)(C)

Fax: 806-775-2883

From: (b) (6)
To: (b) (6).

Cc: Steventon, John (FAA)

Subject: RE: COA Site Access City of lake Jackson Police Department (TX)

Date: Thursday, February 25, 2016 3:19:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

image001.png image002.jpg image003.jpg image004.jpg

(b) (6), (b)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the

requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
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- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation

procedures

- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, February 25, 2016 11:05 AM

To: (b) (6),

Cc: (b) (6)

Subject: RE: COA Site Access

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. Steve Pansky, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Thursday, February 25, 2016 11:34 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** COA Site Access

I am the (b) (6), (b) (7) for the City of Lake Jackson, Texas, and am seeking to institute a sUAS function for Public Safety use and have determined from FAA site information that I will need to submit a COA and declaration letter in order to seek approval for use. In visiting the online site, I found I needed a login for access, and contacted the help desk (see response below). They have directed me to you for assistance.

Name of Entity:

City of Lake Jackson, Texas

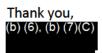
Description of UAS:

DJI Inspire 1 Camera Quad-copter
DJI Phantom 3 Camera Quad-copter

Concept of Use:

Primary use of the UAS is for photographic and video assistance for police and fire operations. These operations would include crime scene photography, active emergency scene monitoring where manned observation is not possible or is unsafe, and search and rescue efforts. The UAS operation would be conducted only by trained law enforcement personnel who have demonstrated proficiency on each aircraft operated. All FAA policies and guidelines would be strictly enforced.

I feel it would be most beneficial to have a single COA cover all public safety operations to that supervision, training, and standards can be consistent. If it is preferable for police and fire offices to submit independently, this can also be arranged. I will serve as the primary contact for public safety operations and, alternately, as the primary contact for police operations if the services must be separated.



Lake Jackson Police Department 5 Oak Drive

Lake Jackson, Texas 77566
(b) (6), (b) (7)(C)

Fax: 979-297-4573
(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

Thank you for contacting the OE/AAA Support Desk regarding the completion of a Public (governmental/educational) COA.

<u>Dina.Reyes-Garcia@faa.gov</u> is the on-line COA administrator and will provide you with the necessary credentials needed for the system access. Please e-mail her the following for her to provide you with a COA username:

- 1. The name of the public entity
- 2. Small description of the UAS
- 3. The concept of the operation (a paragraph will suffice)

Please familiarize yourself with http://www.faa.gov/uas/public_operations/ while waiting for your login credentials.

Once you have received login credentials you will be filing your COAs at:

https://ioeaaa.faa.gov/oeaaa

Should you have additional questions please do not hesitate to contact us. Have a great day!

(b) (6)

CGH Technologies, Inc. 600 Maryland Ave., SW

Suite 800W

Washington, DC 20024 Direct: 202-580-7441 Fax: 202-554-5263

Email: (b) (6)

Web Site: www.cghtech.com

From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Phillips, Charles (FAA): Steventon, John (FAA)

Subject: RE: contact for your Public Use sUAS inquiries

Date: Monday, February 29, 2016 10:43:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

Gentlemen-

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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 and that the it will be operated and maintained in strict compliance with the manufacturer's
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 the site in the event of an emergency (this could include execution of procedures outlined in the
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 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

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 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
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 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
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 to mitigate any attendant hazard for UAS)
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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Phillips, Charles (FAA)

Sent: Monday, February 29, 2016 6:44 AM

To: (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

Subject: contact for your Public Use sUAS inquiries

(b) (6), (b) (7)(C) , let me introduce (b) (6) . (b) (6) is former FAA and now FAA Contractor (primary contact for Public Use sUAS). (b) (6) and I had a great conversation last week and decided since you both were not having any luck with the online website contact that you could just reach out directly to Steve on his personal email account. I would request that you not release Steve's email address unless he personally allows that. He works on the west coast so consider the time zone changes for those early morning calls. ©

Please cc me when you send out emails to (b) (6) just so I can track the progress and assist when needed. Have a great week and please be safe.

for the Pell City Alabama Police department and (b) (6), (b) (7)(C) for the Dale County Sheriff's Office in Ozark, AL. (b) (6), (b) with the Oxford Police Department in Oxford, AL. he is the departments executive officer and new helo pilot. All of experience helo and fixed wing aviators and law enforcement officers who are interested in getting in to the sUAS business. Also I have attached the LEAP map and office contact information. As I mentioned, I am assigned to seven states, Alabama, Mississippi, Tennessee, Kentucky, North Carolina, Virginia and West Virginia.

Charles T. Phillips Special Agent, AHE320 Law Enforcement Assistance Program Federal Aviation Administration

Office: 404.305.6759 Cell: 404.291.2378 Charles.Phillips@faa.gov From: (b) (6)
To: (b) (6),

Cc:Steventon, John (FAA)Subject:RE: Letter for aircraft

Date: Monday, March 14, 2016 10:56:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

Thank you.

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Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Thursday, March 10, 2016 6:46 AM

To: (b) (6)

Subject: Letter for aircraft

I am sending you an email per your request. I look forward to hearing from you.

(b) (6), (b) (7)(C)

 From:
 (b) (6)

 To:
 (b) (6), (b) (7)(C)

 Cc:
 Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov South San Francisco Police Department (CA)

Date: Thursday, March 10, 2016 11:59:00 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

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When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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- A review of the agency's UAS training and proficiency program, to include all training records
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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message----

From: 9-AFS-UAS-Inquiries (FAA) Sent: Tuesday, March 08, 2016 6:31 AM

 $T_{0:}(b)(6)$

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Regards,

(b) (6)

FAA UAS Integration Office www.faa.gov/uas

From: (b) (6), (b) (7)(C)

Sent: Monday, March 07, 2016 5:23 PM To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

I am (b) (6), with the South San Francisco Police Department. We are starting to do research into the feasibility of starting a UAV program in order to operate a small UAV for tactical / emergency operations. We are interested in obtaining information on what regulations we'd have to follow in order to start such a program, and would like a point of contact at the FAA. Any assistance would be greatly appreciated.

From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA)

Subject: RE: On-line COA login credentials

Date: Wednesday, March 16, 2016 5:06:00 PM

Attachments: Order 8900 1 Volume 16.docx

Aircraft Registration.docx

Public Declaration Letter Guidance.doc

(b) (6)

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Would you please forward the letter from the Assistant Town Manager showing that you are authorized to represent them. I will need that document to deal directly with you on all matter associated with the development of their public aircraft program.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at. This may be a bit different form the other COA you processed but many of the items you should be familiar with so I apologize if my information is redundant.

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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Thomas, Tamisha (FAA)

Sent: Wednesday, March 16, 2016 12:59 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6), (b) (7)(C) (b) (6)

Subject: RE: On-line COA login credentials

Hello (b) (6), (b)

Your request for access to UAS COA Online System has been received and will be handled by Steve Pansky. He is cc:ed on this request.

Thanks,

Tamisha L. Thomas Management and Program Analyst Mission Support Services UAS Tactical Operations Section, AJV-115

Email: <u>tamisha.thomas@faa.gov</u>

"Challenges are what make life interesting and overcoming them is what makes life meaningful." - Joshua J. Marine

From: (b) (6)

Sent: Wednesday, March 16, 2016 12:23 PM

To: Thomas, Tamisha (FAA)

Cc: (b) (6)

Subject: On-line COA login credentials

Ms. Thomas,

I am writing to request log-in credentials for the on-line COA system. Our company specializes in assisting municipal and state governments in obtaining the required approvals to be compliant with all federal laws and faa guidelines. We are currently representing The Town of Hanover, Massachusetts. I have attached a letter from the Assistant Town Manager showing that we are authorized to represent them.

The Town of Hanover desires to utilize sUAS to enhance public safety. They intend to use DJI Phantom series and DJI Inspire series aircraft owned by the town and operated exclusively by municipal employees. It is the desire of the Town of Hanover that our organization compile and submit a Public Use COA application on their behalf.

The intended uses of the aircraft includes Police & Fire Department incident command & control, post-accident record keeping, emergency management operations, search & rescue, storm damage assessments, and other public use operations.

As professionals in the aviation industry, we at the Association of Professional Drone Pilots are excited to assist and guide municipal governments in developing and utilizing effective safety management systems and techniques into these operations and help guide this new industry in the proper direction. We look forward to working with you and your team in the future. Please contact me if you have any questions

Thank you,

(b) (6)

Association of Professional Drone Pilots 118 Pine St. Raynham, MA 02767

(b) (6)

From: (b) (6) To: (b) (6)

Cc: Steventon, John (FAA)

Subject: RE: Public COA for government agency Carter County Sheriff"s Office (TN)

Date: Tuesday, March 01, 2016 11:38:00 AM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

image001.png image002.png image003.jpg

(b) (6), (b) (7)(C)

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From: Reyes-Garcia, Dina (FAA)

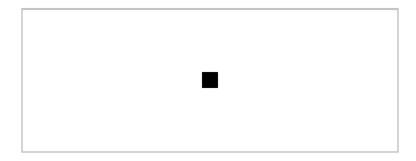
Sent: Monday, February 29, 2016 4:47 PM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: Public COA for government agency

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Monday, February 29, 2016 5:03 PM

To: Reyes-Garcia, Dina (FAA)

Subject: FW: Public COA for government agency

Ms. Reyes-Garcia,

I am writing in regards to getting a COA for our Sheriff's Department.

Name of entity is:

Carter County Tennessee Sheriff's Office

UAS:

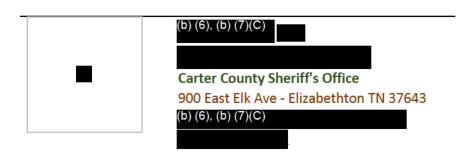
We currently have a DJI Inspire 1. We want to expand our fleet to include two Inspire 1 UAS with FLIR Capability.

Concept of Operations:

We at the Carter County TN Sheriff's office are looking to build our UAV UAS division to facilitate several aspects of our operations. We want to use them as search and rescue vehicles to locate persons and aircraft that may be lost in our rugged mountain terrain. We have had several airplane crashes and our terrain has made them difficult to locate and waiting on manned aircraft reduces our ability to quickly get people to sites. We want to use them as over watch for our K9s during people tracking and as an over watch during high risk warrant service. We have had many floods in our area and are looking for ways to take personal flotation devices and rescue ropes out to a person without endangering more personnel.

I am looking to get access to the OEAAA site to start the COA procedure.

Thank you for your assistance.



From: (b) (6)

Sent: Monday, February 29, 2016 8:30 AM

To: (b) (6), (b) (7)(C)

Subject: Public COA for government agency

Thank you for contacting the OE/AAA Support Desk regarding the completion of a Public (governmental/educational) COA.

<u>Dina.Reyes-Garcia@faa.gov</u> is the on-line COA administrator and will provide you with the necessary credentials needed for the system access. Please e-mail her the following for her to provide you with a COA username:

- 1. The name of the public entity
- 2. Small description of the UAS
- 3. The concept of the operation (a paragraph will suffice)

Please familiarize yourself with http://www.faa.gov/uas/public_operations/ while waiting for your login credentials.

Once you have received login credentials you will be filing your COAs at:

https://ioeaaa.faa.gov/oeaaa

If you are seeking a COA for a commercial business or just for recreation please contact us again as the setup for those are different.

Should you have additional questions please do not hesitate to contact us. Have a great day!

(b) (6)

CGH Technologies, Inc. 600 Maryland Ave., SW Suite 800W Washington, DC 20024

(b) (6)

Fax: 202-554-5263

(b) (6), (b) (7)(C)

Web Site: <u>www.cghtech.com</u>



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Go Green! Print this email only when necessary. Thank you for helping CGH be environmentally responsible.

From: (b) (6) To: (b) (6), (b)

Cc: <u>Steventon, John (FAA)</u>; <u>Foisy, Mark (FAA)</u>

Subject: RE: Public COA request Fremont Police Department, Ohio

Date: Friday, March 11, 2016 9:24:00 AM

Attachments: Aircraft Registration.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations

are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting

Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, March 09, 2016 7:09 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Public COA request

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Wednesday, March 09, 2016 9:09 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** Public COA request

The City of Fremont, Ohio (Sandusky County) Police Department.

The UAS is a DJI Inspire 1 "professional aerial filmmaking and photography platform". It is a quadcopter that measures about 438 X 451 X 301 mm and weighs 2935 grams.

The Inspire will be used to conduct law enforcement related operations. Fremont Police are hoping to utilize the UAS during search operations, searches for missing persons and rescue operations,

crime scene mapping and evidence searches, and foot and vehicle pursuits. Officers will also be giving demonstrations to interested community members to increase community engagement with the Fremont Police and demonstrate the Inspire's capabilities. The UAS has a three mile range from the point of take-off which is expandable to 8 miles.

Please call me directly with questions if there are any, I usually work between 8am and 4pm. I also check my email often.

(b) (6), (b) (7)(C)

Fremont Police Department 1141 West State Street (b) (6), (b) (7) From: (b) (6)
To: (b) (6), (b) (7)
Cc: Steventon, John (FAA)

Subject: RE: UAS Registration St. John the Baptist Parish Sheriff"s Office (LA)

Date: Thursday, March 10, 2016 12:20:00 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image001.png

(b) (6), (b) (7)(C)

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Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison Supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, March 08, 2016 8:25 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: UAS Registration

Importance: High

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



From: (b) (6), (b) (7)(C)

Sent: Tuesday, March 08, 2016 11:22 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** FW: UAS Registration

Good Morning,

I have not received any response. Just want to make sure the email went through.

Thanks



E-mail correspondence with this agency may be considered Public Records. As such, public disclosure of your communication may be required in accordance with State and Federal laws. If you are not the intended recipient, please do not disclose or use the information within this email or its attachments. If you have received this email in error, please delete it immediately.

From: (b) (6), (b) (7)(C)

Sent: Tuesday, March 01, 2016 3:40 PM

To: 'dina.reyes-garcia@faa.gov' **Subject:** UAS Registration

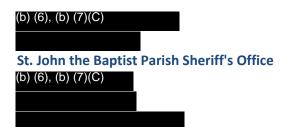
Good Evening,

We have a DJI Phantom 2 Vision Plus that was purchased 08/25/2014. I'm attempting to get everything in order so we can resume using it.

The craft will be utilized for Sheriff's Office Duties.

Also I have the original invoice when the craft was purchases, however in August of 2015 DJI did a warranty replacement on it and shipped us a new one. So the SN on the craft I have doesn't match the SN on my invoice. I do have emails confirming this, however they do not list the SN.

Thanks



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From: Steventon, John (FAA)
To: (b) (6)

Cc: Morra, Joseph (FAA); (b) (6) Crozier, Bill (FAA); (b) (6), (b)

(FAA); Campbell, Paul (FAA); May, Rick (FAA)

Subject: RE: UAS

Date: Wednesday, March 09, 2016 2:17:45 PM

Attachments: <u>Aircraft Registration.docx</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

Hamilton Police Department, Hamilton, MA

(b) (6), (b) (7)

I called you and left you a voice mail with my contact # to return my call if needed.

The following intro letter is what my colleague (b) (6) and I send out to Public Safety Agencies who are interested in an authorization to operate a sUAS for their departments. Please read through this letter and all attachments. These should answer most of your questions if not all. As far as what platform will work best for your department that will depend of several factors, your agencies concept of operations being #1. Our office cannot prescribe the best airframe or system for your department to procure but if you'd like we can put you in contact with other public safety agencies similar to yours that we have observed and approved operations for who will be more than happy to share their lessons learned and maybe even some of their SOP's with your department. This way, if your department is not aviation centric, you may not know what you don't know so getting started could be challenging.

Intro Letter:

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector, we handle law enforcement/fire and first responder Agency UAS requests.

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Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a ... "What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual operational missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating
 Procedures (SOPs) for each phase of flight operation from notification for deployment through
 preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a
 minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost
 communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew
 Resource Management, sterile ground control station protocols, PIC and VO standard
 communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

John D. Steventon Aviation Safety Inspector HQ, Federal Aviation Administration Unmanned Aircraft System Integration Office, AFS-84 470 L'Enfant Plaza, Suite 7100, Room 703

Washington DC, 20024

Phone: w(202)267-8143, c(b) (6) E-Mail: john.steventon@faa.gov

From: Morra, Joseph (FAA)

Sent: Wednesday, March 09, 2016 11:56 AM
To: (b) (6) Steventon, John (FAA)

Cc: Crozier, Bill (FAA); Neylon, John (FAA); Campbell, Paul (FAA); May, Rick (FAA)

Subject: Re: UAS

(b) (6)

John can provide some information to this individual. I've looped him in.

Thanks (in advance) John!

Joe Morra Manager, AFS-84

Sent from my iPad

On Mar 9, 2016, at 11:38 AM, (b) (6) wrote:

Hi everyone:

Who is the best person to answer (b) (6), questions? Thank you.

Regards,

(b) (6)

From: (b) (6), (b) (7)(C)

Sent: Wednesday, March 09, 2016 11:35 AM

To: Ripko, Elena CTR (FAA)

Subject: UAS

Hello, my name is (b) (6), (b) (7)(C) and I (b) (6), (b) (7) at the Hamilton Police Department in Hamilton, MA. We are researching the benefits of having UAS on the force. Are there any UAS pilot training locations near us? Maintenance training facilities? Which UAS would be the best fit for our force and what does

the maintenance of these UAS cost per year? Please email me or contact me at (b) (6), (b) (7)(C) Thank you for your time, (b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: Operating a UAs in the NAS: Houston (TX) Arson Bureau Evidence and Property Room

Date: Tuesday, May 10, 2016 3:22:00 PM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

I am still the point of contact for attaining approval to operate a unmanned aircraft system in the National airspace system.

Below is the latest information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link

(see http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including;

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, May 10, 2016 11:18 AM

To: (b) (6)

Subject: FW: Drone info: FW: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Good Afternoon,

My name is (b) (6), (b) (7)(C) with the Houston Fire Department Arson Bureau. I was recently assigned the task of obtaining the COA for our drone.

I was forwarded some information from emails from last August 2015. The emails stated you as a point of contact and I wanted to make sure you were still the person I should talk to. If so, I would like to talk about exactly what is needed to obtain the COA. I have the following information to contact you. Please let me know if it has changed or if you are no longer the contact person.

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement/(b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

Respectfully,

(b) (6), (b) (7)(C) | Houston Arson Bureau Evidence and Property Room 3102 Center St. | Houston, Texas | 77007 | (b) (6), (b) (7)(C) | Fax: 713.247.8854 (b) (6), (b) (7)(C)

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From: (b) (6)
To: (b) (6)

Cc: Brunner, Alvin A (FAA); Steventon, John (FAA)

Subject: RE: Alexandria LA PD UAS Use

Date: Wednesday, May 11, 2016 9:30:00 AM

Attachments: Order 8900 1 Volume 16.docx

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b)

As Mr. Brunner related, my name is (b) (6) . , I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your

small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link

(see http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including;

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and
 that it will be operated and maintained in strict compliance with the public agencies certification
 criteria
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
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- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other

assistance) Basically, this is a .. "What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS) Air Traffic and Law Enforcement Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: Brunner, Alvin A (FAA)

Sent: Wednesday, May 11, 2016 6:12 AM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: Alexandria LA PD UAS Use

(b) (6), (b)

Short answer is that your PD may use UAS for your various law enforcement duties, but it does require FAA authorization. Please see our website for some background info. http://www.faa.gov/uas/public_operations/ you should also look at http://www.faa.gov/uas/law_enforcement/.

Basically you will need to apply for a COA (Certificate of Authorization) to allow to an alternate means of complying with the see and avoidance of other aircraft. (b) (6), (b) (7) handles all the LEA COAs. He can shepherd you through the process and get you a COA on-line account where you'll fill out the application.

Granted there are more details than what I've mentioned here but this is a brief note to get you going. Also, we, the FAA, don't get into the business of what info that y'all collect will be or won't be admissible in court. We get you in the air, legally. Check with your District Attorney on evidence collection. 4th Amendment issues etc.

Regards,

Al B.

Alvin Brunner

Aviation Safety Inspector, UAS SW Region, NextGen Branch, ASW-220

10101 Hillwood Pkwy, Ste 6S-631

Fort Worth TX 76177 Tele: 817-222-5246

Tele: 817-222-5246

Any comments you may have on services provided are appreciated. Please email feedback to: http://www.faa.gov/about/office_org/headquarters_offices/avs/stakeholder_feedback/afs/regional/

From: (b) (6), (b) (7)(C)

Sent: Tuesday, May 10, 2016 1:27 PM

To: Brunner, Alvin A (FAA)

Subject:

Mr. Burnner,

I am emailing you requesting specific information that you may be able to provide for me in regards to using a UAS for law enforcement use. I am requesting this information on behalf of the Alexandria Police Department in Alexandria, Louisiana. I am a member of the Crime Scene Division. We purchased an UAS to use during crime scene investigations for the use of aerial photographs of the crime scenes/fatal accidents, reconnaissance of properties during search/arrest warrants, and other law enforcement uses. We believe the UAS is a great tool for law enforcement, however, we want to ensure that we do not step outside the boundaries of use of the UAS and to ensure the information that is gathered by use of the UAS will not be disputed in court hearings.

Thank you in advance

(b) (6), (b) (7)(C)

ALEXANDRIA POLICE DEPARTMENT CRIME SCENE

From: (b) (6)

To: (b) (6), (b)

Cc: Steventon, John (FAA)

Cc: Steventon, John (FAA)

Subject: RE: Application Loudoun Sheriff''s Office

Date: Tuesday, May 24, 2016 8:46:00 AM

Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

b) (6), (b)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the latest information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of

the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link

(see http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available

for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: Steventon, John (FAA)

Sent: Tuesday, May 24, 2016 4:39 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Application Loudoun Sheriff's Office

Hi Tom,

On 10/8/2015 Hank Rigol sent Loudoun County Sheriff's Office an introduction letter. It went to a No Public declaration letter had been sent back to the FAA. I will have Steve Pansky send out a new introduction letter to you. This will cover any new changes we have had. Your first step will be to get back to us the Public declaration letter to get your process rolling.

(b) (6) is Cc'ed. At the moment Steve is a one man show for all these intro letters and repository for all requests and pass back of information.

John

John D. Steventon
Aviation Safety Inspector
HQ, Federal Aviation Administration
Unmanned Aircraft System Integration Office, AFS-84
470 L'Enfant Plaza, Suite 7100, Room 703
Washington DC, 20024

Phone: w(202) 267-8143 c(571) 393-0425

E-Mail: john.steventon@faa.gov

From: (b) (6), (b) (7)(C)

Sent: Monday, May 23, 2016 3:43 PM

To: Steventon, John (FAA)

Subject: RE: Application Loudoun Sheriff's Office

Thanks!

From: John.Steventon@faa.gov [mailto:John.Steventon@faa.gov]

Sent: Monday, May 23, 2016 3:41 PM

To: (b) (6), (b) (7)(C)

Cc: Steven.CTR.Pansky@faa.gov

Subject: RE: Application Loudoun Sheriff's Office

Tom,

I will look into your application and get back to you tomorrow.

John

John D. Steventon
Aviation Safety Inspector
HQ, Federal Aviation Administration
Unmanned Aircraft System Integration Office, AFS-84
470 L'Enfant Plaza, Suite 7100, Room 703
Washington DC, 20024

Phone: w(202) 267-8143 c(571) 393-0425

E-Mail: john.steventon@faa.gov

From: (b) (6), (b) (7)(C)

Sent: Monday, May 23, 2016 3:37 PM

To: Steventon, John (FAA)

Subject: Application Loudoun Sheriff's Office

John I received your contact info from (b) (6). (b) who attended a COG meeting you spoke at. I have made several attempts to contact Dina.reyes-garcia, and Henry Rigol. I have not got a response back, I know you are overwhelmed with request, and after taking over this project from someone else, just wanted to know if they could tell me what had been done form our end for our application. I was not left with much to work with as to where we might be in the process. Is there an easy way to find out this information so I can get the ball going on our end with the county attorney if you do not already have the needed document. Thanks for any and all help you can provide!

(b) (6), (b)

Loudoun County Sheriff's Office

From: (b) (6) To: (b) (6),

Cc: Steventon, John (FAA)

Subject: RE: COA EI Dorado Sheriff"s Office (CA)

Date: Tuesday, May 17, 2016 3:58:00 PM

Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

(b) (6), (b)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

I have attached a letter that speaks to the public declaration letter but I am sorry to say I am not allowed to provide an Exemplar of what the letter should look like. And since this is the first time we have communicated let me provide you with the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

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 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6), (b) (7)(C)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcemen (b) (6), Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, May 17, 2016 9:55 AM

To: (b) (6)
Subject: COA

Good day,

I got your contact information from Roseville Fire Department, who we work with as part of an FBI working group, via a forwarded email where you describe the process for obtaining a COA.

I have been tasked with obtaining a COA for my agency, El Dorado Sheriff's Office. I was wondering if you by chance have a sample Declaration Letter we could look at? We would like our county counsel to get it right the first time.

We have purchased and registered 4 sUAS' (Detectives, SWAT, Office of Emergency Service), recently approved a department policy, and are just about done with the procedure manual. My administration really wants to get this thing going. Any advice you could offer would be great.

Thank you for any assistance.

From: (b) (6)
To: (b) (6), (b) (7) n
Cc: Steventon, John (FAA)

Subject: RE: COA System Access Kansas City Kansas Police Department

 Date:
 Monday, May 23, 2016 2:40:00 PM

 Attachments:
 Order 8900 1 Volume 16.docx

 Public Designation Letter Criticipes of the Conference o

Public Declaration Letter Guidance.doc

image001.emz image003.emz image006.png

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- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA) Sent: Monday, May 23, 2016 6:54 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA System Access

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Friday, May 20, 2016 3:50 PM To: Reyes-Garcia, Dina (FAA) Subject: COA System Access

Hi Dina,

I believe I may have contacted you already but can't seem to find all of my previous information to you.

I am with the Kansas City, Kansas Police Department and we have purchased a DJI Inspire 1 XT. We plan on using the UAS for search and rescue as well as situations where we can prevent from putting someone's life in harm's way.

Please advise who do I send our declaration letter to as well as how to gain access to the portal.

Thanks,

From: (b) (6)

To: (b) (6), (b) (7)

Cc: Steventon, John (FAA)

Subject: RE: COA

Date: Monday, May 16, 2016 8:40:00 AM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

image002.png image004.png image005.jpg

(b) (6), (b)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements.

The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link

(see http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including;

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at

the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .. "What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst Aviation Safety (AVS) Safety Technical Support Services (STSS) Air Traffic and Law Enforcement/(b) (6) Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

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From: Reyes-Garcia, Dina (FAA) Sent: Sunday, May 15, 2016 8:15 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Friday, May 13, 2016 10:35 AM

To: Reyes-Garcia, Dina (FAA)

Subject: COA

Good morning Dina,

I was provided your information which I received from (b) (6) [dlewis@cghtech.com] in order to obtain authorization to fly our drone. I have provided the requested information (in red) below. Please let me know if more information is needed. Thanks!

Provide:

- a. The name of the public entity: Clinton County Sheriff's Office, 301 E Walnut St, Frankfort, IN 46041
- b. A small description of the UAS: DJI Inspire 1 drone, with video
- c. The concept of operation (small paragraph will suffice): This drone will be solely operated by certified operators at the Sheriff's Office. The scope of operation will consist of utilization at the following incident types: HazMat, SWAT, Missing Persons, Damage Assessments, Crime Scene Investigations, etc.

She will respond to your email in the order it was received.

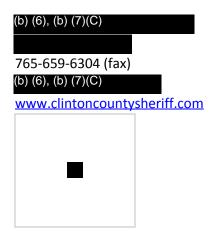
If your COA activity meets "Public" COA criteria:

- a. She'll create an account for you in the COA On-Line system.
- b. She'll provide you login information.

Regards,

(b) (6), (b) (7)(C)

Clinton County Sheriff's Office 301 E Walnut St, Frankfort, IN 46041



CONFIDENTIALITY NOTICE: The contents of this email message and any attachments are intended solely for the addressee(s) and may contain confidential and/or privileged LAW ENFORCEMENT information and may be legally protected from disclosure. If you are not the intended recipient of this message or their agent, or if this message has been addressed to you in error, please immediately alert the sender by reply email and then delete this message and any attachments. If you are not the intended recipient, you are hereby notified that any use, dissemination, copying, or storage of this message or its attachments is strictly prohibited.

From: (b) (6) To: (b) (6).

Cc: Steventon, John (FAA)

Subject: RE: Drone/Public Declaration/COA Process Attleboro Police Department (MA)

Date: Wednesday, May 11, 2016 4:15:00 PM
Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

(b) (6),

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the latest information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you

will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
- a) 5 nautical miles (NM) from an airport having an operational control tower; or
- b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
- c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
- d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including;

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that it will be operated and maintained in strict compliance with the public agencies certification criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a ... "What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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----Original Message----

From (b) (6), (b) (7)(C)

Sent: Wednesday, May 11, 2016 11:26 AM

To: (b) (6) Cc: APD email

Subject: Drone/Public Declaration/COA Process

Hello (b) (6)

Thank you for your time moments ago. As mentioned, (b) (6) with the Attleboro (MA) Police Department looking to be in compliance with our newly established drone program.

(b) (6) has assigned me the COA Process and as you mentioned, I need to have the City's Attorney submit

the "Public Declaration Letter" prior to gaining online access to the COA application. Will you please forward that to my email listed below.

Thank you in advance.



(b) (6), (b) (7)(C) Attleboro Police Department 12 Union Street Attleboro, MA 02703 (b) (6), (b) (7)(C)

Sent from my iPhone

From: (b) (6)

To: (b) (6), (b) (7)

Cc: Steventon, John (FAA)

Subject: RE: login credentials Columbia Police Department, SC

Date: Thursday, May 12, 2016 8:19:00 AM

Attachments: <u>image001.jpg</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

This office had correspondence with (b) (6), (b) (7)(C) from your public affairs back in March 2011 on operating a UAS in the NAS so the information I am providing today is a bit different from what was required back then.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
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 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
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Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

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 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be

implemented in the event of a lost-link occurrence (loss of command and control (C2) link).

- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
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- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
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 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
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 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
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 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115
Steven.ctr.Pansky@faa.gov
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, May 11, 2016 4:12 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: login credentials

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Monday, May 09, 2016 4:02 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** login credentials

Good afternoon Ms. Reyes-Garcia,

My agency wishes to purchase and operate a UAV in the city of Columbia (Columbia Police Department, SC). I am in the process of completing the proposal and expense chart for this project. I am requesting login credentials to the FAA website.

After reading the FAA 333 exceptions, I'm not sure if my agency would be considered "commercial" or not. I am a licensed pilot.

The UAV we are purchasing is a Dji Phantom 4 quad-copter. We intend to utilize this system for

- Crime, accident, and fire scene investigation and documentation
- Search and rescue operations
- Law enforcement surveillance

- Fire suppression activities
- Tactical advantage and live imaging in hostile situations
- Monitoring and inspecting infrastructure
- Aerial photography, filming of events
- Searching for missing persons

Thank you,

(b) (6), (b) (7)(C)
Criminal Investigations Division North Region CID (b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: <u>Steventon, John (FAA)</u>

Subject: RE: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov Holmdel Township Police Department (NJ)

Date: Friday, May 13, 2016 12:57:00 PM

Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at. The information on registration is also included as part of this introduction letter.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

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Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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----Original Message----

From: 9-AFS-UAS-Inquiries (FAA) Sent: Friday, May 13, 2016 8:04 AM

 $T_{0:}$ (b) (6)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Regards,

9-AFS-UAS-Inquiries@faa.gov www.faa.gov/uas

From: (b) (6), (b) (7)(C)

Sent: Monday, May 09, 2016 2:02 PM To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

I would like to obtain information about registering a drone for use by local government (Law Enforcement/Emergency Management). Any information that you can provide would be beneficial. Thank you.

(b) (6), (b) (7)(C)

Holmdel Office of Emergency Management Holmdel Township Police Department From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov city of bend (OR)

Date: Monday, May 16, 2016 9:05:00 AM

Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

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The address for the public declaration letter is;

Federal Aviation Administration
Jacqueline R. Jackson
Air traffic Manager
Unmanned Aircraft Tactical Operations, AJV-115
490 L'Enfant Plaza SW Suite 7105
Washington Dc 20024

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Emerging Technologies Team, AFS-85/AJV-115
(b) (6)

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----Original Message-----

From: 9-AJV-115-UASCOA (FAA) Sent: Sunday, May 15, 2016 9:11 PM

 T_0 (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. Steve Pansky, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

-----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, May 10, 2016 6:19 PM To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

Dear Sir or Ma'am,

I wish to begin the process to have the City of Bend Police Department granted a COA to operate a UAV. To whom an to what address do I have the District Attorney's Office direct the letter? Thank you for your assistance.

Respectfully Submitted,

(b) (6), (b) (7)(C)

Investigations Division Bend Police Department From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov Hawaii Department of Land and Natural Resources

Date: Monday, May 16, 2016 8:58:00 AM

Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6),

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/UA/). Please be aware that you

will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
- a) 5 nautical miles (NM) from an airport having an operational control tower; or
- b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
- c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
- d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including;

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that it will be operated and maintained in strict compliance with the public agencies certification criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a ... "What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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-----Original Message-----From: 9-AJV-115-UASCOA (FAA) Sent: Sunday, May 15, 2016 8:35 PM To (b) (6), (b) (7)(C) Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Friday, May 13, 2016 3:02 PM To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

I am a law enforcement officer with the state of Hawaii Department of Land and Natural Resources. I have been tasked with establishing a UAS program for our agency. I have been browsing the FAA Public Operations site and as advised am emailing to get started. Any and all advice will be appreciated.

From: (b) (6)
To: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Monday, May 16, 2016 8:55:00 AM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

To operate as a public aircraft operator the proponent must be the department you work for. I would recommend you check with your department to see if they are interested in starting a UAS program since they will be the responsible party to the approved application. Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
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- b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
- c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
- d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

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The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including;

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that it will be operated and maintained in strict compliance with the public agencies certification criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst Aviation Safety (AVS) Safety Technical Support Services (STSS) Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations, Emerging Technologies Team, AFS-85/AJV-115

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----Original Message----

From: 9-AJV-115-UASCOA (FAA) Sent: Sunday, May 15, 2016 8:26 PM

 $T_{O:}$ (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. Steve Pansky, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

-----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Saturday, May 14, 2016 1:21 PM To: 9-AJV-115-UASCOA (FAA)

Subject: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

I am a police officer and I personally own an UAS. I think i need to apply for a COA. I have registered my aircraft for both hobbyist and public use. I would like to be able to use my UAS in the performance of my duties.

From: (b) (6)
To: (b) (6).

Cc:Steventon, John (FAA)Subject:RE: OE/AAA Access

Date: Monday, May 16, 2016 8:37:00 AM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

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the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link

(see http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available

for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations, Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: Reyes-Garcia, Dina (FAA) Sent: Sunday, May 15, 2016 8:05 PM

To: (b) (6), (b) Cc: (b) (6)

Subject: RE: OE/AAA Access

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Thursday, May 12, 2016 11:52 AM

To: Reyes-Garcia, Dina (FAA) Subject: OE/AAA Access

Good morning,

My name is (b) (6), (b) and I am the (b) (6), (b) (7) of the Special Operations Division, St. Charles Parish Sheriff's Office in Louisiana. We recently acquired 2 UASs (A DJI Phantom 3 Advanced and Inspire 1) and are trying to implement them into our law enforcement operations. We anticipate using them on a limited basis primarily for crime scene photography, training documentation and search and rescue operations if needed. I was instructed to contact you in order to get access to the OE/AAA online system so that we may apply for the appropriate authorization/waiver. If you need any additional information, I can be reached at the numbers below, or by e-mail. I look forward to hearing from you soon.

Regards,

(b) (6), (b) (7)(C)

St. Charles Parish Sheriff's Office Special Operations Division 260 Judge Edward Dufresne Parkway Luling, LA 70070

(985) 783-1135 Main

(b) (6), (b) (7)(C)

(985) 783-1138 Fax

(985) 783-6807 Dispatch

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6), (b)

Cc: Steventon, John (FAA)
Subject: RE: Pinellas County Sheriff's Office; UAS COA Process; Question

Date: Monday, May 09, 2016 10:51:00 AM
Attachments: AC 00-1 1A Public Aircraft Operations.pdf

Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

(b) (6), (b)

Mr. Rigol is no longer with this program and I have been asked to pick-up all of his work. As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The information Mr. Rigol gave you was accurate back in November 2015 however a few areas have changed.

A recent change to the 8900.1 Article 16, Chapter 4 relates that Government entities conducting public aircraft operations (PAO) involve operations for the purpose of fulfilling a government function that meet certain conditions specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO is limited by the statute to certain government operations within U.S. airspace. These operations must comply with general operating rules including those applicable to all aircraft in the National Airspace System. Government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training. Meaning you can self-certify your pilots and observers as part of your UAS program within the Certificate of Waiver/Authorization (COA) process. Your next question should be, so what does that self-certification look like and I have to say I am not sure. You may want to take a look at Advisory Circular 00-1 1A that I have attached. I would also check with a certified flight instructor who could probably give you a list of federal air regulations that must be understood to operate an aircraft in the National Airspace System. You should be able to build your program around that list. You may also consider contacting (b) (6), from the DOJ/NIJ who could advise you on the status of the program he is developing for UAS Training of public safety agencies. I have copied him on this email.

Below is the newest information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7)

pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link

(see http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the

proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including;

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115
(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Monday, May 09, 2016 7:08 AM To: Rigol, Henry (FAA); (b) (6), (b) (7)(C)

Subject: Pinellas County Sheriff's Office; UAS COA Process; Question

Mr. Rigol,

I left you a message and if it is easier to correspond via email, that works for me. I am with the Pinellas County Sheriff's Office and assigned to the Technical Response Team which is attached to my agency's SWAT team. I have been tasked with researching the process and feasibility of purchasing and using an UAS.

(b) (6), (b) (7)(C) spoke with you in November of 2015 and you had sent him some information on the process. One document you sent was Order 8900 1 Volume 16. I believe I understand the requirements and the process for my agency to obtain a COA to operate a UAS for public use/purposes. I wanted to clarify and confirm the point which shows a pilot in control of a UAS system needs to have a pilot certificate if they are conducting public operations at night.

The UAS system that would be used by my agency would be used during emergency situations requiring a SWAT response. Typically these operations occur during night time hours and the cost of fully training TRT members as a pilots to operate a small UAS system seems prohibitive. A portion of this document appears to answer my question (which is yes, they need to have an FAA

Pilot Certificate or equivalent) but chapter 5, section 5 covers some specific exceptions or guidelines for Law Enforcement operations but does not speak about pilot requirements.

I wanted to make sure I wasn't missing an exception that would allow 24hr operations at low altitude for emergency law enforcement operations by non-certified pilots (ground instruction only).

(b) (6), (b) (7)(C)

Pinellas County Sheriff's Office Special Victims Unit Computer Forensic Unit (b) (6), (b) (7)(C) From: (b) (6)
To: (b) (6),

Cc: Steventon, John (FAA)

Subject: RE: Public COA Request D'Iberville Police Department

Date: Monday, May 16, 2016 8:46:00 AM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

I have no previous correspondence with your agency so below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of

the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link

(see http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

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The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available

for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

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- A review of the agency's UAS training and proficiency program, to include all training records
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 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (b)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

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except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: Reyes-Garcia, Dina (FAA) Sent: Sunday, May 15, 2016 8:16 PM

To: (b) (6), (b)
Cc: (b) (6)

Subject: RE: Public COA Request

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Friday, May 13, 2016 3:01 PM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6), (b)

Subject: Public COA Request

Mrs. Garcia,

I'm writing you to request COA On-line access. I have recently inherited the position of Unmanned Aerial Vehicle Operator at my agency and do not currently have an account. My Deputy Chief was in the process of filling out the required documents, but has since taken another position with the city and no longer qualifies to be an operator.

Our Agency Name: D'Iberville Police Department, MS

Our UAS: DGI Phantom III Professional (Quadcopter w/ Gimbal)

Concept of Operation: This aircraft will be utilized to assist in the locating of Fleeing Suspects, Monitor Traffic at Events, and Search and Rescue Operations. This aircraft is not intended to conduct patrol duties and will only be utilized for the before mentioned duties.

Thank you in advance for your assistance in this matter. If you have any questions, feel free to contact me at (b) (6), (b) (7)

Respectfully,

(b) (6), (b) (7)(C)

D'Iberville Police Deparment

From: (b) (6)

To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)
Subject: RE: Public COA

Date: Thursday, May 19, 2016 10:40:00 AM

Attachments: Order 8900 1 Volume 16.docx

Public aircraft operator UAS program.docx

image001.gif

(b) (6), (b) (7)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

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the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link

(see http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
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Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

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- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
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- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
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As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
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 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

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Respectfully,

(b) (6)

Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115
(b) (6)

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except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, May 18, 2016 7:33 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: FW: Public COA

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Wednesday, May 18, 2016 3:20 PM

To: Reyes-Garcia, Dina (FAA) Subject: RE: Public COA

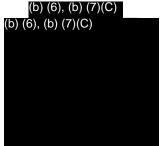
Ms. Reyes,

I have attached the letter again. hopefully it will go through this time.

Respectfully,

(b) (6), (b) (7)(C)

Plainfield Police Department www.plainfieldctpolice.com 210 Norwich Road Plainfield CT 06374



----- Original Message ------

Subject: RE: Public COA

From: <<u>Dina.Reyes-Garcia@faa.gov</u>>
Date: Wed, May 18, 2016 1:23 pm

 $T_{O:}$ (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

The attachment did not go thru. Can you please resend.

From:

Sent: Wednesday, May 18, 2016 9:40 AM

To: Reyes-Garcia, Dina (FAA)

Subject: Public COA

Ms. Reyes,

I have attached a Public Declaration Letter from the Windham County, CT State's Attorney certifying that the Plainfield, CT Police Department qualifies as a Public Entity. Our police department is requesting online access to apply for a COA. As stated in the attached letter our department has acquired a white remote controlled quadcopter unmanned aircraft weighing approximately 6.5 pounds. The department intends to use the unmanned aircraft for various purposes including but not limited to, search and rescue, accident investigation, aerial photography, crime scene investigation photography, and searching for wanted persons.

If you have any further questions, feel free to contact me via email or phone. I look forward to hearing from you.

Respectfully,

(b) (6), (b) (7)(C)

Plainfield Police Department www.plainfieldctpolice.com 210 Norwich Road Plainfield, CT 06374 (b) (6). (b) (7)(C)

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6),

Cc: <u>Steventon, John (FAA)</u>

Subject: RE: Public UAS Collegedale (TN) Police Department

Date: Tuesday, May 17, 2016 4:30:00 PM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b)

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(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, May 17, 2016 12:53 PM

To: Mike Kepner

Cc: Pansky, Steven CTR (FAA) **Subject:** RE: Public UAS

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, May 17, 2016 10:13 AM

To: Reyes-Garcia, Dina (FAA)

Cc:

Subject: Public UAS

Dina Reyes-Garcia,

The Collegedale Police Department recently purchased a UAS and we are seeking approval to operate it within our city limits. Do we need to obtain a COA before operating the UAS?

UAS:

Yuneec Q500 4k Gross Weight – 60 ounces FAA Certificate - (b) (6), (b) (7)

Thank you,

(b) (6), (b) (7)(C)

Support Services
Collegedale Police Department
4910 Swinyar Drive
Collegedale, TN 37315
(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6),

Cc: Steventon, John (FAA)

Subject: RE: UAS for governmental operation

Date: Wednesday, May 18, 2016 11:10:00 AM

Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

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- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations, Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: Steventon, John (FAA)

Sent: Wednesday, May 18, 2016 7:51 AM

To: (b) (6), (b)

Cc: (b) (6)

Subject: RE: UAS for governmental operation

(b) (6), (b)

I work with (b) (6) for proponents who are interested in this arena. Please allow (b) (6) to reply to you with his welcome letter and attachments for everything you will need.

John

John D. Steventon
Aviation Safety Inspector
HQ, Federal Aviation Administration
Unmanned Aircraft System Integration Office, AFS-84
470 L'Enfant Plaza, Suite 7100, Room 703
Washington DC, 20024

Phone: w(202) 267-8143 c(571) 393-0425

E-Mail: john.steventon@faa.gov

From: (b) (6), (b) (7)(C)

Sent: Wednesday, May 18, 2016 10:42 AM

To: Steventon, John (FAA)

Subject: UAS for governmental operation

Mr. Steventon,

The Bastrop County Sheriff's Office recently obtained a DJI Phantom 3 drone. I have been trying to determine the necessary procedures for us to operate the drone in a law enforcement capacity, but I'm not having much luck. Most of the information that I have found is related to manned aircraft. Can you tell me exactly what we need to do in order to operate it legally?

Thank you,

(b) (6), (b) (7)(C)

Bastrop County Sheriff's Office White Collar Crimes 200 Jackson St Bastrop, TX 78602

512-549-5100 Main (b) (6), (b) (7)(C) 512-549-5188 Fax

Warning: This document is UNCLASSIFIED//FOR OFFICIAL USE ONLY (U//FOUO). It contains information that may be exempt from public release under the Freedom of Information Act (5 U.S.C. 552). It is to be controlled, stored, handled, transmitted, distributed, and disposed of in accordance with Bastrop County Sheriff's Office policy relating to FOUO information and is not to be released to the public or other personnel who do not have a valid "need-to-know" without prior approval of an authorized Bastrop County Sheriff's Office official.

From: To: (b) (6), (b) (7)(C) Cc:

Steventon, John (FAA)

Subject: FW: City of Alachua - Alachua Police Department Drone Program

Date: Tuesday, May 24, 2016 3:18:00 PM Attachments: Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link

(see http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available

for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
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 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (b)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

(b) (b)

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From: 9-AFS-UAS-Inquiries (FAA) Sent: Tuesday, May 24, 2016 11:39 AM

Го: (b) (6)

Subject: FW: City of Alachua - Alachua Police Department Drone Program

Regards,

FAA UAS Integration Office

9-AFS-UAS-Inquiries@faa.gov www.faa.gov/uas

From: (b) (6), (b) (7)(C)

Sent: Tuesday, May 24, 2016 12:42 PM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: City of Alachua - Alachua Police Department Drone Program

To whom it may concern,

I am a Police Officer for the City of Alachua in Alachua, FL and I have been tasked with getting a drone registered for use within the police department. I would appreciate any information that you could provide me to start that process.

Thank you,

--

(b) (6), (b) (7)(C)

Alachua Police Department 15000 NW 142 Terrace Alachua, FL 32615 (b) (6), (b) (7)(C)

This email may contain Law Enforcement Sensitive or Privileged Information, which is intended only for use by the individual or entity to which the email is addressed. It should be treated as Law Enforcement Sensitive / For Official Use Only. If you receive this email in error, please notify the sender immediately. Further dissemination should be limited to a minimum, consistent with the purpose of supporting effective law enforcement and public safety.

From: (b) (6)

To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA); (b) (6), (b) (7)(C)

Subject: FW: COA Application Summit County (UT) Sheriff"s Office

Date: Wednesday, June 01, 2016 1:50:00 PM

Attachments: <u>image001.jpg</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

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Since this is the first contact I have had with you (sent information to Chad Hoffmeyer from your department) below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at. Registration is addressed in the information. Please let me know if you need additional information.

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 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
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Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

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The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including;

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
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the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

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As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
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 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
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 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: 9-AJV-115-UASOrganization (FAA) Sent: Tuesday, May 31, 2016 11:18 AM

To: (b) (6)

Subject: FW: COA Application

Good Afternoon (b) (6)

Would you be able to help the gentleman below?

Thanks.

(b) (6)

Program Management and Administrative Support Specialist

Emerging Technologies Team (AJV-115)

Federal Aviation Administration

Phone: (b) (6)

Email: (b) (6)

From: (b) (6), (b) (7)(C)

Sent: Tuesday, May 31, 2016 12:18 PM **To:** 9-AJV-115-UASOrganization (FAA)

Subject: COA Application

Hello,

I'm seeking information as to how to begin the application process for a COA for a law enforcement agency. I was advised that you are having difficulty with the online process to obtain an N number. Can you please advise how I can obtain an N number by paper registration?

Thanks,

(b) (6), (b) (7)

Description: Siddoway1

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: <u>Steventon, John (FAA)</u>

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov Summit County Sheriff"s Office

Date: Wednesday, May 25, 2016 1:57:00 PM
Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

To answer your question

Do I as the operator need to have a pilot's license (and which one, sport/private etc..). Or if someone in my agency has their pilots license can I fly a UAS under their license if they are supervising the program?

If the proponent is conducting a UAS operation that meets the definition of a public aircraft operation under title 49 USC 40102(a)(41) and 40125(a)2 then the proponent may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training. If they are not conducting the operation as a public aircraft operator then they would have to have to operate under civil operations that require an FAA-issued pilot certificate. The pilot in command (PIC) may be augmented by persons manipulating the controls. However, the PIC retains complete and overall responsibility for the flight and has the ability to assume the duties of the UAS pilot at any point during the flight (8900.1 Volume 16, Chapter 4, 16-4-1-3 attached).

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in

accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
- a) 5 nautical miles (NM) from an airport having an operational control tower; or
- b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
- c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
- d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including;

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that it will be operated and maintained in strict compliance with the public agencies certification criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and

the Visual Observer(s) (VO).

• An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a ... "What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation

Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

----Original Message-----

From: 9-AFS-UAS-Inquiries (FAA) Sent: Wednesday, May 25, 2016 8:29 AM

 To : (b) (6)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Regards,

FAA UAS Integration Office 9-AFS-UAS-Inquiries@faa.gov www.faa.gov/uas

From: (b) (6), (b) (7)(C)

Sent: Tuesday, May 24, 2016 5:20 PM To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

I am putting together a UAS program for my law enforcement agency. One of the questions I have not been able to find an answer to is do I as the operator need to have a pilots license (and which one, sport/private etc..). Or if someone in my agency has their pilots license can I fly a UAS under their license if they are supervising the program?

Thank you,

(b) (6), (b) (7)(C)

Summit County Sheriff's Office

(b) (6), (b)

From: To: (b) (6), (b) (7)(C) Cc:

Steventon, John (FAA)

Subject: FW: Public Use COA Process Torrance Police Department (CA)

Friday, June 03, 2016 9:04:00 AM Attachments: Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with Science Applications International Corporation (SAIC) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Reference your questions

1. The text below states that a "declaration letter" and drone registration must be completed prior to being granted access to the COA on-line system to submit our COA. So does this mean we must purchase the drone we intend to use even before being granted the authorization to use it from the FAA?

It is not necessary to purchase the aircraft before you gain access to the online program but as part of the COA on Line application, the proponent must enter information on the aircraft they will be utilizing including the registration number before the COA can be approved.

2. Is the PIC / drone operator required to hold an actual pilots license while flying the drone in a public/governmental capacity?

The FAA just recently clarified the requirements for a public agency to operate an aircraft as a public aircraft operator. If the government entity is conducting Public Aircraft Operations for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2), the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

Public agencies will still be required to obtain approval from the FAA before operating UAS in the NAS. And this approval will come in the form of a COA, however, public operators, such as first responders, can establish their own training and certification program for their pilots, observers and aircraft maintenance personnel. These programs must establish an acceptable level of safety to operate within the National Airspace System.

3. In regards to the Blanket Area Public Safety COA, does this allow us to purchase/fly a drone for training purposes within the guidelines of airport proximity, prior to submitting the COA for authorization?

Like a training COA the Blanket Area Public COA is an approval to operate the UAS as a public aircraft Operator. But unlike the training COA, the Blanket area COA does not specify a specific training location. It states that if the public aircraft operator is operating daytime, under visual flight rules, visual line of sight with the aircraft at or below 400 feet in Class G airspace and are operating greater than 5 NMs for a controlled airport, greater than 3 NMS from an uncontrolled airport with a published instrument approach or greater than 2 NMS from any other airport or heliport then they can conduct their training mission. And once the proponent feels they have a level of competency to operate the UAs in actual missions they can also use the approved blanket area COA to conduct missions so long as they are operating under the provisions of the COA.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: 9-AFS-UAS-Inquiries (FAA)

Sent: Thursday, June 02, 2016 8:20 AM

To: (b) (6)

Subject: FW: Public Use COA Process

Regards,

FAA UAS Integration Office

<u>9-AFS-UAS-Inquiries@faa.gov</u> <u>www.faa.gov/uas</u>

From: (b) (6), (b) (7)(C)

Sent: Thursday, June 02, 2016 10:20 AM

To: 9-AFS-UAS-Inquiries (FAA) **Subject:** Fw: Public Use COA Process

Good morning,

I am a (b) (6), (b) (7) with the Torrance Police Department in the Los Angeles area. I am part of a team at our agency which is exploring the option of implementing a UAS for search and rescue and law enforcement functions at our department. I have been in contact with Kevin Doty who is a Principle Operations Inspector for the FAA out of the Long Beach office. Kevin has been very helpful and forwarded me the below information regarding the COA process. However, I still have some questions and a few topics I'd like to clarify if you would please.

1. The text below states that a "declaration letter" and drone registration must be completed prior to being granted access to the COA on-line system to submit our COA. So does this mean we must purchase the drone we intend to use even before being granted the authorization to use it from the FAA?

- 2. Is the PIC / drone operator required to hold an actual pilots license while flying the drone in a public/governmental capacity?
- 3. In regards to the Blanket Area Public Safety COA, does this allow us to purchase/fly a drone for training purposes within the guidelines of airport proximity, prior to submitting the COA for authorization?

Thank you very much for your time. Our team is actually meeting this morning for the first time at our department in regards to this project.

Thanks again,

(b) (6), (b) (7)(C)

From: Kevin.Doty@faa.gov < Kevin.Doty@faa.gov >

Sent: Wednesday, April 6, 2016 10:48 AM

To: (b) (6), (b) (7)(C)

Subject: Public Use COA Process

(b) (6), (b) (7)(C)

Below is the information I received on the public use COA process which should be helpful getting your program started. Please let me know additional questions you may have after reading this.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their

appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can either register your aircraft by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. You can also register your aircraft using the paper link or going to http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including;

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command

- (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Broad Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this broad area expanded operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

Here are the basic pieces to the declaration letter that must be present:

- 1. That the individual making the declaration is not the entity who is requesting to operate as a public aircraft operator (No Self Certification)
- 2. The individual making the declaration is in a position to determine that the entity requesting to operate as a public aircraft operator is actually qualified. Hence the reason why for your agency, the State attorney General is the appropriate party.
- 3. That the letter references the two sections in title 49 USC (40102A(41)(C) and 40125B) so that the individual making the declaration understands that the entity is a political subdivision of the state based on these sections.
- 4. They reference some section in the State Statue that declares that the entity qualifies as apolitical sub division of the state for the purposes of operating as a public aircraft operator.

- 5. That the entity that is requesting to operate as a public aircraft operator will not operate for compensation or hire in reference to Title 49 USC 40125B.
- 6. And that the declaration letter is dated and signed by the individual making the declaration on that agencies (i.e.-Attorney General of the State) letterhead.

Regards,

Kevin Doty Principal Operations Inspector Long Beach, FSDO W: 562-420-1755 Ext 132

F: 562-420-6765

E: kevin.doty@faa.gov

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: RE: agency COA

Date: Thursday, May 26, 2016 2:18:00 PM

Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

If you were in contact with Mr. Rigol you should have received the information below but please take another look since some of the program has surely changed since you last communicated with the FAA. The most important first step is for you to get the public declaration letter completed by your City, County or State Attorney General that declares your agency qualified to operate as a public aircraft operator. See my attachment.

So, below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link

(see http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command

- (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: (b) (6), (b) (7)(C)

Sent: Thursday, May 26, 2016 11:05 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** agency COA

Good Morning Mrs. Garcia,

Once again I am reaching out to you for a password access so that our law enforcement unit may get consideration or apply for the COA . I emailed you months ago whereby you referred me to Mr. Henry Rigol and following his referral, to another person the correspondence have seemed to have rest on deaf ears because the contact person in Pennsylvania has never responded to my request and at this point I no longer have his info.

If there is a way for you to expedite this process so we can apply I would appreciate it.

Thank you in advance (b) (6), (b) (7)(C)

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Maibach, Joseph (FAA); Steventon, John (FAA)

Subject: RE: Civilian Police Drone Operation

Date: Friday, June 03, 2016 9:52:00 AM

Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The utilization of a UAS by a public agency is a bit different than that of a civil operator. Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of

the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link

(see http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost

communication between PIC and the Visual Observer(s) (VO).

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the site in the event of an emergency (this could include execution of procedures outlined in the
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 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: Maibach, Joseph (FAA)

Sent: Thursday, June 02, 2016 12:37 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Civilian Police Drone Operation

Good speaking with you today. Have you been in contact with Steve Pansky? He handles the law enforcement COAs. He should be able to better assist you in getting your COA.

Good luck!

Joe

Joseph Maibach
Air Traffic Control Specialist
UAS Tactical Operations Section, AJV-115
470 L'Enfant Plaza, SW, Suite 7105
Washington, DC 20024

Phone: 202-267-9060 joseph.maibach@faa.gov

From: (b) (6), (b) (7)(C)

Sent: Thursday, June 02, 2016 3:24 PM

To: Maibach, Joseph (FAA)

Subject: Civilian Police Drone Operation

Sir,

I am (b) (6), (b) (7), a (b) (6), (b) with the Bedford Texas Police Department. I have been in contact with (b) (6), (b) (7)(c) who you emailed information to on December 30, 2015. She had sent a proposal about the City of Bedford Texas using a drone to take publicity videos/pictures during large events, and other actions in which they may utilize the drone.

I would like to see if I could get a few minutes of your time to ask a few questions. Everything I have read indicates that if the drone is used by a profit business, or any governmental organization, that specific rules apply, especially in Class B Airspace.

Also, as I understand now, the new rule changes will be along the lines of the following: Small UAS (under 55 pounds)

Daylight and visual-line-of-sight operations.

The person actually flying a small UAS would be an "operator."

An operator would have to be at least 17 years old, pass an aeronautical knowledge test and obtain an FAA UAS operator certificate.

To maintain certification, the operator would have to pass the FAA knowledge tests every 24 months.

A small UAS operator would not need any further private pilot certifications (i.e., a private pilot license or medical rating).

Questions:

- Could the department purchase and fly a drone based on the same justification the city is using?
 - o What are the parameters of use that exempts the city from the rules in the FAA guidance?
- I understand the legal considerations of the 4th Amendment/Search and Seizure, etc, but could we/the BPD fly it for general law enforcement use: Check the top of a building for a burglary entry point; find a lost child, citizen or fleeing suspect; do a security flight over the city park looking for vandals, fly the drone down drainage ditches looking for graffiti, do a surveillance flyover of a parking lot for possible vehicle burglary suspects, etc, etc, etc?
- From what understand from Natalie Foster, all I need to do is buy a drone, register it, and fly it. No COA, no 333, etc?
- Is there a time when the above rules are expected to be finalized?
- Is there a way to see what the requirements actually are/what the knowledge test consists of?
- Is there a basic checklist that I could follow before flying? (Buy drone, register drone, obtain air worthiness certificate, attain COLA, 333 waver, operator proficiency test, fly...???)

Thanks and I would appreciate any information you could provide on the subject.

(b) (6), (b) (7)(C)

Bedford Police Department

2121 L. Don Dodson Drive, Bedford, TX 76021-5832

(b) (6), (b) (7)(C)

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From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: <u>Steventon, John (FAA)</u>

Subject: RE: COA

Date: Tuesday, June 21, 2016 3:56:00 PM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

I am a contractor with (b) (6)

Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

DEVELOPING A UAS PROGRAM

UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

- 1. Concept of Operation (ConOps) -The type of sUAS required depends upon an agency's ConOps which can describe a proposed <u>system</u> from the viewpoint of the mission and people who will use it. The ConOps expresses what the Incident Commander intends to accomplish and how it will be done using available resources. ConOps can be developed in different ways, but usually share the same properties. In general, a ConOps include:
 - Statement of the goals and objectives of the system
 - Strategies, tactics, policies, and constraints affecting the system
 - Organizations, activities, and interactions among participants and stakeholders

- Clear statement of responsibilities and authorities delegated
- Specific operational processes for fielding the system
- Processes for initiating, developing, maintaining, and retiring the system
- 2. Assess the technologies available that meet your concept of operation.
 - Web search technologies available
 - Communicate with other agencies utilizing UASs
 - Contact manufactures that will meet your needs
 - Understand city, county, state and federal laws surrounding the utilization of UASs
- 3. Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:
 - Analysis Summary
 - Project Overview and Background
 - Discussion of Alternatives
 - Alternatives Goals and Concepts
 - Life-Cycle Costs and Benefits
 - Risk Analysis
 - Cost/Benefit Analysis
 - Project Cost/Benefit Analysis
 - Review/approval Signatures
- 4. Community Acceptance- The benefits of sUAS technology can quickly become over-shadowed by controversy surrounding its use if the community is not educated on the benefits and operational controls that are in place. Topics of discussion should include:
 - legal guidelines for use of airborne technology
 - A community engagement plan
 - Compliance with City, County, State and federal policies, ordinances and laws.

ACCESS TO COA ON LINE

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components) including the UAS

registration.

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- Blanket Area Public Safety (BAPS) COA- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
 - (1) At or below 400 feet AGL; and
 - (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

3. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the

construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).

4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst Aviation Safety (AVS) S

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA) Sent: Tuesday, June 21, 2016 8:25 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Monday, June 20, 2016 10:25 AM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6), (b) (7)(C)
Subject: COA

Good Morning Dina,

The town of Swansea Massachusetts Police Department is requesting access to apply for COA for our UAS unit. We will be operating a Yuneec Typhoon H and Q500 drones in the program which is designed as a search and rescue/ Community Service/relations. We are a 32 sworn member department in Southeastern Massachusetts and have been working with a local business to get the program started. I anxiously await your reply so I may get the application started.

Thank you

(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C) (cell is best way to reach me other than email)

(b) (6), (b) (7)(C)

Swansea Police Department Abuse Unit Supervisor 1700 G.A.R Highway Swansea, MA 02777

(b) (6), (b) (7)(C) (b) (6), (b) (7)(C) From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: RE: COA for Erie County (OH) Sheriff"s Office

Date: Thursday, May 26, 2016 8:14:00 AM
Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses-certificates/aircraft_certification/aircraft_registry/UA/). Please be aware that you

will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
- a) 5 nautical miles (NM) from an airport having an operational control tower; or
- b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
- c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
- d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including;

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that it will be operated and maintained in strict compliance with the public agencies certification criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a ... "What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

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----Original Message---From: Reyes-Garcia, Dina (FAA)
Sent: Wednesday, May 25, 2016 1:10 PM
To: (b) (6), (b) (7)(C)
Cc: (b) (6)
Subject: RE: COA for Sheriff's Office

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

-----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Wednesday, May 25, 2016 11:32 AM

To: Reyes-Garcia, Dina (FAA) Subject: COA for Sheriff's Office

This email is in regards to developing a drone program for our Sheriff's Office. I have been tasked by (b) (6), (b) develop this program meeting local and FAA guidelines for operation.

Erie County Ohio Sheriff's Office 2800 Columbus Ave. Sandusky, OH 44870 419-625-7951

We have purchased 2 small drones for our use: DJI Phantom 3 Advanced and DJI Inspire1 upon receiving information that our units had to be purchased prior to application. These units were chosen due to reliability, safety, being current production models, and ease of use and training. The Advanced is primarily a training drone since the controllers and controls for both devices are identical. The Inspire1 will be the primary unit used for Search and Rescue and Tactical situations to enhance officer safety and improve operating efficiency.

I am requesting an account on the online COA system to beging this process.



Provide:

- a. The name of the public entity.
- b. A small description of the UAS.
- c. The concept of operation (small paragraph will suffice).

From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA)

Steventon, John (FAA)

Subject: RE: COA Info Township of West Orange (NJ)

Date: Tuesday, June 14, 2016 10:18:00 AM

Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

image001.jpg image002.png image003.png image004.png image005.png

(b) (6), (b) (7)(C)

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Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6)
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

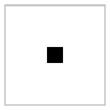
Sent: Tuesday, June 14, 2016 6:28 AM

To: (b) (6)

Cc: West Orange
Subject: COA Info

(b) (6)

Thanks for speaking with me in reference to public Drone usage and providing some COA information. This is my email address at the police department and any info can be forwarded here. Thanks



PLEASE NOTE CHANGE IN EMAIL ADDRESS BELOW*



Please consider the environment before you print this email

America, Land of the Free, Because of the Brave!

Confidentiality Notice: This e-mail contains information from the Township of West Orange. It is intended only for the person or entity to which it is addressed and may contain information that is privileged, confidential or otherwise protected from disclosure. Dissemination, distribution or copying of this e-mail or the information contained within it by anyone other than the intended recipient or an employee or agent responsible for delivering the message to the intended recipient is prohibited. If you have received this e-mail in error, please call 973-325-4100 and destroy the original message and all copies.

From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA)

Subject: RE: Drone Program Town of Greenburgh Police Department NY

Date: Tuesday, May 24, 2016 10:19:00 AM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available

for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (b)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, May 24, 2016 6:28 AM

To: (b) (6)

Subject: Drone Program

Good Day Sir.

My name is (b) (6), (b) (7)(C) of the Town of Greenburgh Police Department in lower Westchester County NY. I have recently been in touch with (b) (6)

because I am in the process of obtaining a UAV for our Special Operations Unit. While working close with him, he advised me that you were the liaison for Law Enforcement and would be the right person to speak with.

The reason for my email is to ask if you could please guide me in the process of obtaining a COA and possibly supply me with any other literature. As the first department in Westchester County looking into operating a UAV, I would like to be well informed so I can expedite the process and eliminate some of the "red tape".

Any information you can provide me would be greatly appreciated. I thank you in advance for your time and patience in this matter and will await your response.

(b) (6), (b) (7)

Town of Greenburgh Police Department 188 Tarrytown Rd White Plains N.Y. 10607 (b) (6), (b) (7)(C) From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Myrvold, Erik (FAA); Steventon, John (FAA)

Subject: RE: Initial UAS COA Assistance Greenwich CT

Date: Thursday, June 09, 2016 3:12:00 PM

Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of

the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link

(see http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations, Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: Myrvold, Erik (FAA)

Sent: Thursday, June 09, 2016 10:55 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: Initial UAS COA Assistance

(b) (6), (b) (7)(C)

Per our conversation this afternoon, I made a call or two to get you headed in the right direction. I was advised that (b) (6) is the Law Enforcement UAS expert here. He is also CC'd on this email.

His office phone number is (b) (6)

I expect he will be able to more expertly answer your UAS questions and assist you in getting a COA for operations.

Best regards,

Erik Myrvold

9-ATOR-HQ-RT-REQ@faa.gov

FAA Air Traffic Security

System Operations Support Center (SOSC)

Tel 202-267-8276

From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA)

Subject: RE: Law Enforcement UAS Authorization (UNCLASSIFIED) Madison County (AL) Sheriff"s Office

Date: Friday, June 03, 2016 11:26:00 AM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

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Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
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----Original Message----

From: (b) (6), (b) (7)(C)

Sent: Thursday, June 02, 2016 1:10 PM

To: (b) (6)

Subject: Law Enforcement UAS Authorization (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

(b) (6)

I am interested in applying for authorization to operate UAS for tactical operations within Madison County,

Alabama and possibly surrounding counties. I currently work for PMUAS on Redstone Arsenal as a Government employee and am also attached to Madison County Sheriff's Office SWAT as a Deputy Sheriff.

MCSO is interested in using a UAS such as a Phantom 3 for operations including ISR for subject barricades, standoffs, and possibly search warrants. The UAS will not be operated over 400AGL. I am currently a qualified UAS operator for various military SUAS and for the time being will be operating the systems.

I am interested in the process for Class G Notifications as well as a applying for a COA since we may need to use systems without much notice. We also have a couple small airports in the area. I have AWR from the federal side that I got approved for operating Phantom 3.

Respectfully,

(b) (6), (b) (7)(C)

CLASSIFICATION: UNCLASSIFIED

From: (b) (6)
To: (b) (6), (b) (7)(C)

Subject: RE: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov Jasper County (MO) Sheriff

Date: Tuesday, June 07, 2016 4:18:00 PM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

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When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see http://www faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
- a) 5 nautical miles (NM) from an airport having an operational control tower; or
- b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
- c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
- d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including;

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that it will be operated and maintained in strict compliance with the public agencies certification criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a ... "What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

A review of the agency's UAS training and proficiency program, to include all training records

- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

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----Original Message-----

From: 9-AFS-UAS-Inquiries (FAA) Sent: Tuesday, June 07, 2016 11:04 AM

 $T_{O:}$ (b) (6)

Subject: FW: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

Regards,

FAA UAS Integration Office 9-AFS-UAS-Inquiries@faa.gov www.faa.gov/uas From: (b) (6), (b) (7)(C)

Sent: Tuesday, June 07, 2016 11:49 AM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:	

My department has purchased a drone and needs to know what we need to do with the faa.

From: To: (b) (6), (b) (7)(C) Cc:

Steventon, John (FAA)

RE: Public COA Information San Diego County Sheriff"s Office Subject:

Date: Tuesday, June 21, 2016 4:01:00 PM Attachments: Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

> image002.gif image003.jpg

(b) (6), (b) (7)(C)

I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

DEVELOPING A UAS PROGRAM

UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

- 1. Concept of Operation (ConOps) -The type of sUAS required depends upon an agency's ConOps which can describe a proposed system from the viewpoint of the mission and people who will use it. The ConOps expresses what the Incident Commander intends to accomplish and how it will be done using available resources. ConOps can be developed in different ways, but usually share the same properties. In general, a ConOps include:
 - Statement of the goals and objectives of the system
 - Strategies, tactics, policies, and constraints affecting the system

- Organizations, activities, and interactions among participants and stakeholders
- Clear statement of responsibilities and authorities delegated
- Specific operational processes for fielding the system
- Processes for initiating, developing, maintaining, and retiring the system
- 2. Assess the technologies available that meet your concept of operation.
 - Web search technologies available
 - Communicate with other agencies utilizing UASs
 - Contact manufactures that will meet your needs
 - Understand city, county, state and federal laws surrounding the utilization of UASs
- 3. Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:
 - Analysis Summary
 - Project Overview and Background
 - Discussion of Alternatives
 - Alternatives Goals and Concepts
 - Life-Cycle Costs and Benefits
 - Risk Analysis
 - Cost/Benefit Analysis
 - Project Cost/Benefit Analysis
 - Review/approval Signatures
- 4. Community Acceptance- The benefits of sUAS technology can quickly become over-shadowed by controversy surrounding its use if the community is not educated on the benefits and operational controls that are in place. Topics of discussion should include:
 - legal guidelines for use of airborne technology
 - A community engagement plan
 - Compliance with City, County, State and federal policies, ordinances and laws.

ACCESS TO COA ON LINE

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link

Communication and any FAA Technical Standard Order (TSO) components) including the UAS registration.

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
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 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_ certificates /aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- 1. <u>Blanket Area Public Safety (BAPS) COA</u>- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
 - (1) At or below 400 feet AGL; and
 - (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

3. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight

which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).

4. <u>Emergency COA</u>- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA) **Sent:** Tuesday, June 21, 2016 8:38 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: FW: Public COA Information

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Monday, June 13, 2016 1:57 PM

To: Reyes-Garcia, Dina (FAA)

Subject: FW: Public COA Information

Good Morning Ms. Reyes-Garcia,

My name is (b) (6), (b) (7) and I'm writing to obtain the credentials necessary for access to the FAA governmental COA system. The above attachment covers the information (b) (6) mentioned. Please feel free to contact me if there are any questions/concerns.

Thank you,

(b) (6), (b) (7)(C)

San Diego Sheriff's Department Law Enforcement Support Detail Information Led Policing / SADLE Team / OPSG

(b) (6), (b) (7)(C)

From: (b) (6)

Sent: Thursday, January 14, 2016 7:20 AM

To: (b) (6), (b) (7)(C)

Subject: Public COA Information

Greetings (b) (6), (b) (7)(C)

Thank you for contacting the Support Desk regarding the completion of a Public (governmental/educational) COA, it was a pleasure to speak with you. Ms. Dina.Reyes-Garcia@faa.gov is the on-line COA administrator and will provide you with the necessary credentials needed for system access. Please email her the following, for her to provide you with a COA user name:

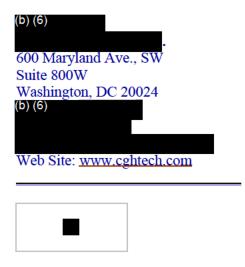
- 1. The name of the public entity.
- 2. A small description of the UAS.
- 3. The concept of operation (small paragraph will suffice)

Please familiarize yourself with http://www.faa.gov/uas/public_operations/ while waiting for

your login credentials

Hoping this information is helpful. Should you have additional questions please do not hesitate to contact us. Make it a great day!

Regards,



Providing

"Satisfaction through Quality" ... with every solution.

This electronic mail message and any attached files contain information intended for the exclusive use of the individual or entity to whom it is addressed and may contain information that is proprietary, privileged, confidential and/or exempt from disclosure under applicable law. If you are not the intended recipient, you are hereby notified that any viewing, copying, disclosure or distribution of this information may be subject to legal restriction or sanction. Please notify the sender, by electronic mail or telephone, of any unintended recipients and delete the original message without making any copies.

Go Green! Print this email only when necessary. Thank you for helping CGH be environmentally responsible.

From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA)

Subject: RE: Public COA Request - Rialto Police Department

Date: Tuesday, June 21, 2016 4:12:00 PM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

DEVELOPING A UAS PROGRAM

UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

- 1. Concept of Operation (ConOps) -The type of sUAS required depends upon an agency's ConOps which can describe a proposed <u>system</u> from the viewpoint of the mission and people who will use it. The ConOps expresses what the Incident Commander intends to accomplish and how it will be done using available resources. ConOps can be developed in different ways, but usually share the same properties. In general, a ConOps include:
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 - Strategies, tactics, policies, and constraints affecting the system
 - Organizations, activities, and interactions among participants and stakeholders

- Clear statement of responsibilities and authorities delegated
- Specific operational processes for fielding the system
- Processes for initiating, developing, maintaining, and retiring the system
- 2. Assess the technologies available that meet your concept of operation.
 - Web search technologies available
 - Communicate with other agencies utilizing UASs
 - Contact manufactures that will meet your needs
 - Understand city, county, state and federal laws surrounding the utilization of UASs
- 3. Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:
 - Analysis Summary
 - Project Overview and Background
 - Discussion of Alternatives
 - Alternatives Goals and Concepts
 - Life-Cycle Costs and Benefits
 - Risk Analysis
 - Cost/Benefit Analysis
 - Project Cost/Benefit Analysis
 - Review/approval Signatures
- 4. Community Acceptance- The benefits of sUAS technology can quickly become over-shadowed by controversy surrounding its use if the community is not educated on the benefits and operational controls that are in place. Topics of discussion should include:
 - legal guidelines for use of airborne technology
 - A community engagement plan
 - Compliance with City, County, State and federal policies, ordinances and laws.

ACCESS TO COA ON LINE

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components) including the UAS

registration.

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- Blanket Area Public Safety (BAPS) COA- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
 - (1) At or below 400 feet AGL; and
 - (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

3. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the

construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).

4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst Aviation Safety (AVS) Saf

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: Reyes-Garcia, Dina (FAA) Sent: Tuesday, June 21, 2016 8:43 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Public COA Request - Rialto Police Department

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. Steve Pansky, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Monday, June 20, 2016 2:02 PM

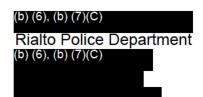
To: Reyes-Garcia, Dina (FAA)

Subject: Public COA Request - Rialto Police Department

Dear Dina,

I was given your contact information as a start to our Public COA request.

The Rialto Police Department (California) is requesting a COA in order to utilize UAS's (Yuneec Typhoon H and/or Instanteye MK2 types) in the City of Rialto to augment our patrol and emergency response capabilities. This is in direct response to the countless budget cuts and the rise in terrorist activates in and around our County (San Bernardino). Both these UAS's are commonly used in Law Enforcement for such purposes and I can go into much greater detail with respect to capabilities and applications as needed. Please guide me through the steps necessary to obtain a Public COA. Thank you.



From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: RE: UAS COA Process Johnson County Sheriff's Office KS

Date: Thursday, June 16, 2016 8:32:00 AM Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part

48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link

(see http://www.faa.gov/licenses certificates/aircraft certification/aircraft registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including;

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the

manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115
(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Wednesday, June 15, 2016 8:17 AM

To: (b) (6)

Subject: UAS COA Process

Sir,

I am a member of the Johnson County, Kansas Sheriff's Office located in the Kansas City Metropolitan area. We've started the process for purchasing and developing a UAS program for our agency. We met with (b) (6), (b) (7)(C) with the Kansas City, Missouri Police Department yesterday to discuss the process for obtaining a COA and look at their equipment. I am working with our attorney on the declaration letter as we speak and securing bids for a DJI Inspire 1 platform. I wanted to touch base to see if you would be a good point of contact or if there was someone else that would handle getting us started.

Thank you,

(b) (6), (b) (7)(C)

Johnson County Sheriff's Office
(b) (6), (b) (7)(C)

[&]quot;Strength is the product of struggle. You must do what others don't to achieve what others won't" ~Henry Rollins~

From: (b) (6) To: (b) (6), (b) (7)(C)

Subject: RE: UAS for law enforcement - Salt Lake City Police Department

Date: Thursday, June 16, 2016 8:23:00 AM
Attachments: Order 8900 1 Volume 16.docx

image001.png

Public Declaration Letter Guidance.doc

Yes. I am still the point of contact for public safety agencies requesting to operate within the NAS. Since my email on 2/12/2016 we have made a few changes to the program including the ability to issue a blanket area COA in lieu of the training COA and the proponent who is operating as a public aircraft operator conducting an actual public mission under the definition of Title 49 USC 40102A41 and 40125a2 is now able to develop their own training and certification program for their pilots and observers as well as their own medical certification program See changes to 8900.1 Article 16 chapter 4 (Attached). I have added the updated introduction letter below. The first step is still getting the public declaration letter to me for review by the FAA's Legal office.

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).

- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures
 (SOPs) for each phase of flight operation from notification for deployment through preflight, launch,
 recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency
 procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile
 ground control station protocols, PIC and VO standard communications and any special mitigation
 procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ
 to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

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From: (b) (6), (b) (7)(C)

Sent: Wednesday, June 15, 2016 7:49 AM

To: (b) (6)

Subject: UAS for law enforcement

Are you still over law enforcement applications to the FAA for UAS systems? My department has started up the proposal again. I am trying to get the COA application going and get everyone at my department in line with what needs to be done. I have the details you sent me in February of 2015. I want to make certain we set this up properly. Thank you for any assistance you can provide.



From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: <u>Steventon, John (FAA)</u>

Subject: RE: Unmanned Aircrafts Pittsburg Police Department (CA)

Date: Friday, June 17, 2016 3:09:00 PM

Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

DEVELOPING A UAS PROGRAM

UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

- 1. Concept of Operation (ConOps) -The type of sUAS required depends upon an agency's ConOps which can describe a proposed <u>system</u> from the viewpoint of the mission and people who will use it. The ConOps expresses what the Incident Commander intends to accomplish and how it will be done using available resources. ConOps can be developed in different ways, but usually share the same properties. In general, a ConOps include:
 - Statement of the goals and objectives of the system
 - Strategies, tactics, policies, and constraints affecting the system
 - Organizations, activities, and interactions among participants and stakeholders

- Clear statement of responsibilities and authorities delegated
- Specific operational processes for fielding the system
- Processes for initiating, developing, maintaining, and retiring the system
- 2. Assess the technologies available that meet your concept of operation.
 - Web search technologies available
 - Communicate with other agencies utilizing UASs
 - Contact manufactures that will meet your needs
 - Understand city, county, state and federal laws surrounding the utilization of UASs
- 3. Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:
 - Analysis Summary
 - Project Overview and Background
 - Discussion of Alternatives
 - Alternatives Goals and Concepts
 - Life-Cycle Costs and Benefits
 - Risk Analysis
 - Cost/Benefit Analysis
 - Project Cost/Benefit Analysis
 - Review/approval Signatures
- 4. Community Acceptance- The benefits of sUAS technology can quickly become over-shadowed by controversy surrounding its use if the community is not educated on the benefits and operational controls that are in place. Topics of discussion should include:
 - legal guidelines for use of airborne technology
 - A community engagement plan
 - Compliance with City, County, State and federal policies, ordinances and laws.

ACCESS TO COA ON LINE

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components) including the UAS

registration.

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

Public agencies will still be required to obtain approval from the FAA before operating UAS in the NAS. However, public operators may establish their own training and certification program for their pilots, observers and aircraft maintenance personnel. These programs must establish an acceptable level of safety. Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

WHAT COA(s) ARE RIGHT FOR YOUR AGENCY

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- 1. <u>Blanket Area Public Safety (BAPS) COA</u>- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
 - (1) At or below 400 feet AGL; and
 - (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

3. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).

4. <u>Emergency COA</u>- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Friday, June 17, 2016 9:55 AM

To: (b) (6)

Subject: Unmanned Aircrafts

Good morning Steven,

I received your contact information from (b) (6). (b) (7)(C) with the Alameda County Sheriff's Office in California. I am located in adjacent Contra Costa County and attended Tom's presentation on his UAV program. I am in charge of our SWAT team and own a UAV of my own. I see the practical uses for the UAV for our officer safety as well as scene coverage, evidence collection and tracking of fleeing suspects.

Our agency does not have any licensed pilots, but we do have several UAV enthusiasts. I would like to discuss what is needed from our agency to be able to fly a UAV during our operations. In speaking with Tom, there seems to be a lengthy process and we may not be able to officially deploy a UAV until some of the regulations have changed.

Would you please give me a call or email works fine as well. I would like to know what I can do now to get our agency going to be in compliance with the FAA on the use of an UAV.

I thank you in advance.

(b) (6), (b) (7)(C)

Pittsburg Police Department 65 Civic Avenue Pittsburg, Ca. 94565 (b) (6), (b) (7)(C) From: (b) (6

To: (b) (6), (b) (7)(C)

Cc: <u>Steventon, John (FAA)</u>

Subject: White Settlement Texas Police Department
Date: Tuesday, June 07, 2016 4:23:00 PM
Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/UA/). Please be aware that you

will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA has recently modified its Public Safety UAS program to allow for a more rapid process in approving UAS operations while expanding the access into the NAS. This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
- a) 5 nautical miles (NM) from an airport having an operational control tower; or
- b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
- c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
- d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct initial training at a specific training site that will remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated above. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

The current COA process typically takes 60 business days to complete due to the review of the proponents documentation by several entities within the FAA. It is projected that under this COA program where Feasibility and Safety assessments as well as coordination at the Air traffic Control facility level should result in a processing time of approximately 15 business days of receipt of the application. The Application will still require the proponent to address several areas within the application including;

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that it will be operated and maintained in strict compliance with the public agencies certification criteria.
- A description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a ... "What will you do if something bad happens?).

For those operations that cannot operate within this criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for which could include operations in Class D, E and C Airspace as well as operations conducted during the night.

As part of this blanket area expanded operational COA approval, the FAA may conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115
(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Monday, June 06, 2016 5:58 PM To: 9-AFS-UAS-Inquiries (FAA)

Subject: Message from www.faa.gov: 9-AFS-UAS-Inquiries@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contacts/

Message:

I am the (b) (6), (b) (7) for the White Settlement Texas Police Department. We are located in Fort Worth next to the Naval Air Station - Fort Worth Joint Reserve Base. We are looking into the possibility of purchasing a UAS for law enforcement operations for Missing Persons, SWAT Operations, Hostage Operations etc. Can you give me information if this would be practical due to our close proximity to the Naval Air Station and their flight operations?

From: (b) (6)
To: (b) (6)

Subject: Operating an unmanned aircraft in the National Airspace System

Date: Wednesday, July 13, 2016 8:06:00 AM
Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

(b) (6)

I notice that I forwarded you information back in May of this year on operating in the NAS so a lot of the information below is the same as what was provided earlier with the exception of the 107 rule link. That link is

https://www.faa.gov/uas/getting_started/fly_for_work_business/becoming_a_pilot/

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

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 - Statement of the goals and objectives of the system
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 - Specific operational processes for fielding the system
 - Processes for initiating, developing, maintaining, and retiring the system
- 2. Assess the technologies available that meet your concept of operation.
 - Web search technologies available
 - · Communicate with other agencies utilizing UASs

- Contact manufactures that will meet your needs
- Understand city, county, state and federal laws surrounding the utilization of UASs
- 3. Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:
 - Analysis Summary
 - Project Overview and Background
 - Discussion of Alternatives
 - Alternatives Goals and Concepts
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 - Risk Analysis
 - Cost/Benefit Analysis
 - Project Cost/Benefit Analysis
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 - A community engagement plan
 - Compliance with City, County, State and federal policies, ordinances and laws.

ACCESS TO COA ON LINE

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components) including the UAS registration.
- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria
- A lost-link procedures document that describes the specific lost-link procedure that will be

implemented in the event of a lost-link occurrence (loss of command and control (C2) link).

- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

WHAT COA(s) ARE RIGHT FOR YOUR AGENCY

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

1. <u>Blanket Area Public Safety (BAPS) COA</u>- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:

- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

- 3. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).
- 4. <u>Emergency COA</u>- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned

aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst Aviation Safety (AVS) Safety Technical Support Services (STSS) Air Traffic and Law Enforcement (b) (6) Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations, Emerging Technologies Team, AFS-85/AJV-115

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(b) (6) (b) (6)

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From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: (b) (6)

Subject: Operating an unmanned aircraft in the national airspace system.

Date:Thursday, July 14, 2016 10:09:00 AMAttachments:Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

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Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: (b) (6)

Sent: Thursday, July 14, 2016 5:07 AM

To: (b) (6)

Subject: RE: 333 exemption

Dorothy- I have a 10-11 EST and 1300-1430 conference calls today. Anytime outside of these times work for me.

(b) (6) (b) (6) Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115
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From: (b) (6)

Sent: Wednesday, July 13, 2016 3:58 PM

To: (b) (6)

Subject: RE: 333 exemption

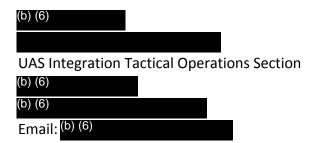
(b) (6)

I spoke with (b) (6), (b) (7)(C) of the Hammond, IN Police Department. The Police Department has purchased and obtained registration for at least one unmanned aircraft system that will be flown for law enforcement purposes. Toward that end, (b) (6), (b) (7) is seeking a Public COA for the Hammond Police Department to conduct such operations under.

Rather than just point him back to you, I would like to do a conference call with you and him tomorrow morning. It will allow you to connect with him and give me a final chance to make sure any questions he has about the Civil COA side are addressed.

If this is okay with you, please advise what time for a call works best for you.

Regards,



From: (b) (6)

Sent: Wednesday, July 13, 2016 5:15 PM

To: (b) (6), (b) (7)(C)

Cc: Burnette-Davis, Marie (FAA); (b) (6)

Subject: RE: 333 exemption

(b) (6), (b) (7)(C)

If you are referring to a 333 exemption, I am sorry but I only deal with public aircraft operators who are applying for Certificate of waiver/authorizations(COAs). I have copied (b) (6) that works 333 exemptions and she may be able to assist you. If you do not hear from her please let me know and I will see if I can get someone to give you an answer.

(b) (6)

Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115
(b) (6)

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: Burnette-Davis, Marie (FAA) Sent: Wednesday, July 13, 2016 11:34 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: FW: 333 exemption

(b) (6), (b) (7)(C)

Try contacting (b) (6) at Headquarters and he'll will be able to help you. He processes the Law Enforcement COAs.

From: (b) (6), (b) (7)(C)

Sent: Wednesday, July 13, 2016 1:15 PM

To: Burnette-Davis, Marie (FAA)

Subject: 333 exemption

Can you advise if the 333 exemption request has gone through. The website is very confusing and many of the links on the FAA website are not working. My tracking number is 1k0-8qqi-vs8y. I will also forward you my conformation email. I am not sure I even filled out the correct form. I'm sorry to be a pain in the butt, but like I said if I was smarter I would not be in law enforcement.

(b) (6), (b) (7)(C)

Hammond Police Department

(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

From: marie.burnette-davis@faa.gov [marie.burnette-davis@faa.gov]

Sent: Wednesday, July 13, 2016 11:55 AM

To: (b) (6), (b) (7)(C) Subject: RE: UAS-website

The Small UAS Rule will not be in effect until late Aug our Sept. If you meet all the requirements you can fly under it. If you need something sooner, I would apply for 333 exemption.

From: (b) (6), (b) (7)(C)

Sent: Wednesday, July 13, 2016 11:52 AM

To: Burnette-Davis, Marie (FAA) Subject: RE: UAS-website

In your opinion is it better to get a blanket coa or to fly under the small usa rule

(b) (6), (b) (7)(C)

Hammond Police Department

(b) (6), (b) (7)(C)

From: marie.burnette-davis@faa.gov [marie.burnette-davis@faa.gov]

Sent: Wednesday, July 13, 2016 11:33 AM

To: (b) (6), (b) (7)(C) Subject: UAS-website Per our phone conversation.

http://www.faa.gov/uas

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: Operating an unmanned aircraft in the national airspace system

Date: Thursday, July 14, 2016 4:09:00 PM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

If you wish to operate the UAS in support of a public agency you can operate under the FAA's new 14 CFR Part 107 Rule or you agency can also fly as a civil operator. That link is https://www.faa.gov/uas/getting_started/fly_for_work_business/becoming_a_pilot/ However is it is the desire of your depart to operate as a public aircraft operator then the following information can assist you in developing an unmanned aircraft program.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

DEVELOPING A UAS PROGRAM

UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

1. Concept of Operation (ConOps) -The type of sUAS required depends upon an agency's ConOps

which can describe a proposed <u>system</u> from the viewpoint of the mission and people who will use it. The ConOps expresses what the Incident Commander intends to accomplish and how it will be done using available resources. ConOps can be developed in different ways, but usually share the same properties. In general, a ConOps include:

- Statement of the goals and objectives of the system
- Strategies, tactics, policies, and constraints affecting the system
- Organizations, activities, and interactions among participants and stakeholders
- Clear statement of <u>responsibilities</u> and <u>authorities</u> delegated
- Specific operational processes for fielding the system
- Processes for initiating, developing, maintaining, and retiring the system
- 2. Assess the technologies available that meet your concept of operation.
 - Web search technologies available
 - Communicate with other agencies utilizing UASs
 - · Contact manufactures that will meet your needs
 - Understand city, county, state and federal laws surrounding the utilization of UASs
- 3. Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:
 - Analysis Summary
 - Project Overview and Background
 - Discussion of Alternatives
 - Alternatives Goals and Concepts
 - Life-Cycle Costs and Benefits
 - Risk Analysis
 - Cost/Benefit Analysis
 - Project Cost/Benefit Analysis
 - Review/approval Signatures
- 4. Community Acceptance- The benefits of sUAS technology can quickly become over-shadowed by controversy surrounding its use if the community is not educated on the benefits and operational controls that are in place. Topics of discussion should include:
 - legal guidelines for use of airborne technology
 - A community engagement plan
 - Compliance with City, County, State and federal policies, ordinances and laws.

ACCESS TO COA ON LINE

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide

sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components) including the UAS registration.
- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see http://www.faa.gov/licenses certificates /aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight.

Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

WHAT COA(s) ARE RIGHT FOR YOUR AGENCY

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- 1. <u>Blanket Area Public Safety (BAPS) COA</u>- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
 - (1) At or below 400 feet AGL; and
 - (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower: or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

Jurisdictional COA- For those operations that cannot operate within the Blanket area COA criteria or
wish to expand their access beyond the Blanket Area COA described above, an expanded COA
application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C

Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).

4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

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From: (b) (6), (b) (7)(C) To: Cc:

Steventon, John (FAA)

Subject: RE: Cape Coral Police Department and Drones

Date: Thursday, July 07, 2016 1:19:00 PM Attachments: Order 8900 1 Volume 16.docx Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

I am a contractor with (b) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

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- Blanket Area Public Safety (BAPS) COA- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
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 - (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

3. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the

construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).

4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: (b) (6), (b) (7)(C)
Sent: Thursday, July 07, 2016 8:22 AM

To: (b) (6)

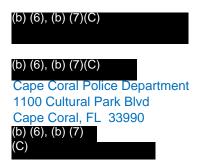
Subject: Cape Coral Police Department and Drones

Good Morning,

I have been tasked with a research project in regards to drones and police departments. I have been reading guidelines for how to obtain the COA for police departments, but I am getting very confused in the details and was wondering if you can assist me, please. I know that Florida has some different rules than other states, so I need some help.

When you have some available time, can you call or email me, please.

Thank you for your time,



NOTE: Florida has a very broad public records law, and under Florida law, most written communications to or from city staff regarding city business to include your e-mail address is considered public records and will be made available to the public and the media upon request. If you do not want your email message and or your e-mail address released in response to a public records request, do not send electronic mail to this entity. Instead, contact this office by phone or in writing. Additionally, this communication is intended only for the addressee. If you are not the intended recipient, do not copy, disclose, or distribute this message to anyone else. If you have received this communication in error, please contact the sender of the message to inform him or her of the error and then delete this message

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: RE: COA Login New Jersey Department of Corrections

Date: Wednesday, July 06, 2016 8:13:00 AM
Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

DEVELOPING A UAS PROGRAM

UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

Concept of Operation (ConOps) -The type of sUAS required depends upon an agency's ConOps which can describe a proposed <u>system</u> from the viewpoint of the mission and people who will use it. The ConOps expresses what the Incident Commander intends to accomplish and how it will be done using available resources. ConOps can be developed in different ways, but usually share the same properties. In general, a ConOps include:

Statement of the goals and objectives of the system

- Strategies, tactics, policies, and constraints affecting the system
- Organizations, activities, and interactions among participants and stakeholders
- Clear statement of <u>responsibilities</u> and <u>authorities</u> delegated
- Specific operational processes for fielding the system
- Processes for initiating, developing, maintaining, and retiring the system

Assess the technologies available that meet your concept of operation.

- Web search technologies available
- Communicate with other agencies utilizing UASs
- Contact manufactures that will meet your needs
- Understand city, county, state and federal laws surrounding the utilization of UASs

Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:

- Analysis Summary
- Project Overview and Background
- Discussion of Alternatives
- Alternatives Goals and Concepts
- Life-Cycle Costs and Benefits
- Risk Analysis
- Cost/Benefit Analysis
- Project Cost/Benefit Analysis
- Review/approval Signatures

Community Acceptance- The benefits of sUAS technology can quickly become over-shadowed by controversy surrounding its use if the community is not educated on the benefits and operational controls that are in place. Topics of discussion should include:

- legal guidelines for use of airborne technology
- A community engagement plan
- Compliance with City, County, State and federal policies, ordinances and laws.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components) including the UAS registration.
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 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a ..."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper

link (see http://www.faa.gov/licenses_ certificates /aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

WHAT COA(s) ARE RIGHT FOR YOUR AGENCY

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- 1. <u>Blanket Area Public Safety (BAPS) COA</u>- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
 - (1) At or below 400 feet AGL; and
 - (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized

coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

- 3. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).
- 4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

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The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, July 06, 2016 4:41 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA Login

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Tuesday, July 05, 2016 9:32 AM

To: Reyes-Garcia, Dina (FAA)

Subject: COA Login

Good morning.

I was given your email after contacting the helpdesk. I was informed that I needed to provide you with the following information:

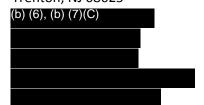
- 1. The name of the public entity.
 - a. The New Jersey Department of Corrections
- 2. Small description of the UAS.
 - a. Being purchased from UAV Solutions. Model is Phoenix Ace LE. It is 18"x18" and weighs 6.3 lbs. It will be equipped with an EO/IR camera. It will have a 900MHz Command and Control with a 5.8 GHz analog video.
- 3. The concept of the operation.
 - a. The New Jersey Department of Corrections has 13 state operated facilities that are responsible for housing over 20,000 inmates. The Department's Special Operations Group is the tactical arm of the Department that is charged with providing tactical and response support. The UAV would be used as a tool to assist with aerial surveillance of the facilities for possible contraband drops and in the event of any escape/escape attempts. The UAS will have an infrared camera for operation during low light situations. The UAS will also give us the opportunity to perform integrity checks and inspection on the exterior of our facilities to check for any disrepair.

Please let me know if you need any additional information.

Regards,

(b) (6), (b) (7)(C)

New Jersey Department of Corrections Special Operations Group Office of Emergency Management P.O. Box 863 Trenton, NJ 08625



CONFIDENTIALITY NOTICE: This email message, including any attachments, might contain information that is confidential, legally privileged, or otherwise protected or exempt from disclosure under applicable law and is intended solely for the use of the intended recipient. If the reader of this message is not the intended recipient, you are hereby notified that any reading, dissemination, distribution, copying, or other use of this message or its attachment is prohibited. If you have received this message in error, please notify the sender immediately and delete this message. Your receipt of this message is not intended to waive any applicable privilege or claim of confidentiality.

From: (b) (6) To: (b) (6), (b)

Subject: RE: COA questions local Police department Ontario (CA) Police Department

 Date:
 Wednesday, July 13, 2016 8:38:00 AM

 Attachments:
 Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Yes, we can get you access into the Class C airspace to conduct first responder UAS missions however you will need to have approval from the Air traffic Control facility each time you need to operate within that location but this should only take about 30 minutes to complete the phone coordination based on an approved Certificate of Waiver/Authorization (COA). Please understand that we require a first responder agency to first train with the UAS before they conduct actual missions so your initial COA would be for training only and you would need to identify a training location but that should not be too difficult.

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INTRODUCTION

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The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

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- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

WHAT COA(s) ARE RIGHT FOR YOUR AGENCY

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- 1. Blanket Area Public Safety (BAPS) COA- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
- a) 5 nautical miles (NM) from an airport having an operational control tower; or

- b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
- c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
- d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

- 3. Jurisdictional COA- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).
- 4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being

entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

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-----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Tuesday, July 12, 2016 4:53 PM

 $T_{O:}$ (b) (6)

Subject: COA questions local Police department

Hello Sir,

I have been tasked with obtaining a COA for our Police Department. I work for the Ontario Police Department, California, and in our City's center is an International Airport. I know there have been some changes in the requirements for the COA. I am curious to how big of a hurdle it will be with our airport.

We are not looking for a huge expensive UAS, just a consumer type DJI with built in safety features.

We want the UAS for forensic photography and rare tactical operations for observation. We would never need to go over 200'.

Can you direct me to the correct direction and if you feel the FAA would even grant a COA with our circumstances of the airport?

Thank you for your time!

(b) (6), (b) (7)(C)
Ontario Police Department
(b) (6), (b) (7)

From: (b) (6)
To: (b) (6), (b) (7)
Cc: Steventon, John (FAA)

Subject: RE: Drone COA Sonoma County Sheriff's Office in Sonoma County California

Date: Friday, July 15, 2016 9:59:00 AM

Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

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- Specific operational processes for fielding the system
- Processes for initiating, developing, maintaining, and retiring the system
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 - Understand city, county, state and federal laws surrounding the utilization of UASs
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registration.

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 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
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 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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(p) (p)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

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From: Reyes-Garcia, Dina (FAA) Sent: Friday, July 15, 2016 4:22 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Drone COA

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Wednesday, July 13, 2016 9:07 PM

To: Reyes-Garcia, Dina (FAA)

Subject: Drone COA

Dina Reyes-Garcia,

I have been referred to you by the OE/AAA Support Desk.

I am (b) (6), (b) with the Sonoma County Sheriff's Office in Sonoma County California.

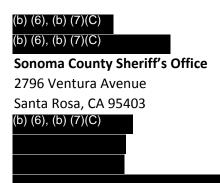
I have been assigned to implement a Drone program for our agency.

We would initially be using the DJI Phantom 3 and DJI Phantom 4.

The concept would be to provide aerial support for our Search and Rescue team, SWAT team, Explosives Ordinance Disposal Team, Investigations and Patrol.

My hope is that we can use the UAV to search remote areas of our coast line and rugged mountain areas for lost persons; Assist the SWAT team and Explosives Ordinance Disposal Team in clearing large or complex areas for persons or hazards before committing personnel to those areas; Help investigations with evidence collection and documentation at large crime scenes; Assist patrol officers in searching for dangerous or fleeing suspects when an exigency exists. I understand that this is new technology that brings many complex issues. We are working closely with other partner agencies to develop policies, guidelines and best practices. This project has been assigned to our aviation unit to take advantage of the existing knowledge of FAA regulations and the National Airspace System.

Thank you for your consideration,



From: (b) (6)
To: (b) (6), (b) (7)(C)
Stoyonton, John (FAA)

Cc: <u>Steventon, John (FAA)</u>

Subject: RE: Goodyear Police Drone program

Date: Wednesday, June 29, 2016 8:33:00 PM

Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

image001.png

(b) (6), (b) (7)(C)

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 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

WHAT COA(s) ARE RIGHT FOR YOUR AGENCY

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- 1. <u>Blanket Area Public Safety (BAPS) COA</u>- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
 - (1) At or below 400 feet AGL; and

- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

- 3. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).
- 4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, June 28, 2016 12:54 PM

To: (b) (6)

Subject: Goodyear Police Drone program

Hey (b) (6)

This is (b) (6), (b) (7)(C) I spoke to you on the phone about getting information on starting a drone program for the Goodyear Police Department. Can you please send me any information that you have on what we need to do to start a drone program? Thank you very much for your time my



All messages created in this system belong to the City of Goodyear and should be considered a public record subject to disclosure under Arizona Public Records Law (A.R.S. 39-121). City employees, City public officials, and those who generate E-mail to them, should have no expectation of privacy related to the use of this technology. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited.

From: (6), (b) (7)(C) To: Cc:

Steventon, John (FAA)

Subject: RE: Obtain an account for the UAS COA Online System, Umatilla County Sheriff"s Office (OR)

Date: Wednesday, July 06, 2016 8:22:00 AM

Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

image001.jpg image002.jpg

(b) (6), (b) (7)(C)

I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

DEVELOPING A UAS PROGRAM

UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

- 1. Concept of Operation (ConOps) -The type of sUAS required depends upon an agency's ConOps which can describe a proposed system from the viewpoint of the mission and people who will use it. The ConOps expresses what the Incident Commander intends to accomplish and how it will be done using available resources. ConOps can be developed in different ways, but usually share the same properties. In general, a ConOps include:
 - Statement of the goals and objectives of the system
 - Strategies, tactics, policies, and constraints affecting the system

- Organizations, activities, and interactions among participants and stakeholders
- Clear statement of responsibilities and authorities delegated
- Specific operational processes for fielding the system
- Processes for initiating, developing, maintaining, and retiring the system
- 2. Assess the technologies available that meet your concept of operation.
 - Web search technologies available
 - Communicate with other agencies utilizing UASs
 - Contact manufactures that will meet your needs
 - Understand city, county, state and federal laws surrounding the utilization of UASs
- 3. Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:
 - Analysis Summary
 - Project Overview and Background
 - Discussion of Alternatives
 - Alternatives Goals and Concepts
 - Life-Cycle Costs and Benefits
 - Risk Analysis
 - Cost/Benefit Analysis
 - Project Cost/Benefit Analysis
 - Review/approval Signatures
- 4. Community Acceptance- The benefits of sUAS technology can quickly become over-shadowed by controversy surrounding its use if the community is not educated on the benefits and operational controls that are in place. Topics of discussion should include:
 - legal guidelines for use of airborne technology
 - A community engagement plan
 - Compliance with City, County, State and federal policies, ordinances and laws.

ACCESS TO COA ON LINE

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link

Communication and any FAA Technical Standard Order (TSO) components) including the UAS registration.

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).
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Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS) Air Traffic and Law Enforcement Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations, Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, July 06, 2016 4:51 AM To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Obtain an account for the UAS COA Online Syste,

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. Steve Pansky, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Tuesday, July 05, 2016 1:30 PM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6), (b) (7)(C)

Subject: Fwd: Obtain an account for the UAS COA Online Syste,

Hi Ms Reyes-Garcia,

Our agency is seeking information on how to obtain an account and username to access the online UAS COA Online System.

The name of our public agency is: Umatilla County Sheriff's Office, (main headquarters located in Pendleton, Oregon)

The description of the UAS is: DJI Phantom 4, http://www.drone-world.com/dji-phantom-4-drone

The concept of the operation: The UAS will be used primarily to assist the operations of the Umatilla County Sheriff's Office (UCSO) Search and Rescue Team, a statutory mandated function of the Sheriff's Office, Oregon Revised Statutes 404.110. The UAS will greatly enhance our capabilities to search for and locate lost or missing persons, families and their vehicles, which could ultimately save lives. The Umatilla County Sheriff's Office Search and Rescue Team performs an invaluable service to the community by providing a professional, organized, mostly volunteer team that is devoted to helping lost and missing persons, overdue hunters and hikers, stranded motorist, and others. They also provide aid in medical emergencies, including body recoveries and perform many other types of search and rescue missions. SAR team members also assist our deputies and other law enforcement agencies in the region during major crimes by locating and recovering evidence, suspect tracking and other tasks. They are available to assist search and rescue teams in other jurisdictions, both regionally and throughout Oregon and Washington whenever they are needed. The motto of the UCSO Search and Rescue Team is: "THIS WE DO, SO OTHERS MAY LIVE"

The UAS can also be used by the agency for other law enforcement purposes, including crime and crash scene documentation, locating and collecting evidence, and to provide safety and security during public events and at schools, colleges, and other locations.

If you have any other questions or need further information, please contact me.

Thank you,

From: (b) (6)

Date: Tue, Jul 5, 2016 at 5:16 AM

Subject: RE: Obtain an account for the UAS COA Online Syste,
To: '(b) (6). (b) (7)(C)

Thank you for contacting the OE/AAA Support Desk regarding the completion of a Public (governmental/educational) COA.

<u>Dina.Reyes-Garcia@faa.gov</u> is the on-line COA administrator and will provide you with the necessary credentials needed for the system access. Please e-mail her the following for her to provide you with a COA username:

- 1. The name of the public entity
- Small description of the UAS
- 3. The concept of the operation (a paragraph will suffice)

Please familiarize yourself with http://www.faa.gov/uas/public_operations/ while waiting for your login credentials.

Once you have received login credentials you will be filing your COAs at: https://ioeaaa.faa.gov/oeaaa

Should you have additional questions please do not hesitate to contact us. Have a great day!



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"Satisfaction through Quality" ... with every solution.

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Go Green! Print this email only when necessary. Thank you for helping CGH be environmentally responsible.

From: (b) (6), (b) (7)(C)

Sent: Friday, July 01, 2016 6:11 PM

To: oeaaa_helpdesk

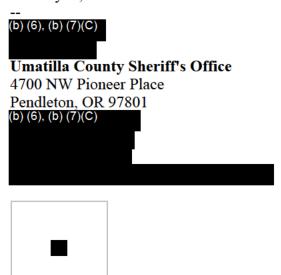
Subject: Obtain an account for the UAS COA Online Syste,

Dear Sirs,

Please provide information on how to obtain an account to access the online UAS COA Online System.

"To better support the needs of our customers, FAA deployed a web-based application system. The <u>UAS COA Online System</u> provides applicants with an electronic method of requesting a COA. Applicants will need to obtain an account in order to access the online system."

Thank you,



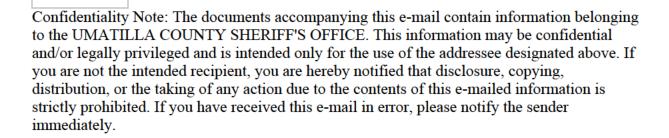
Confidentiality Note: The documents accompanying this e-mail contain information belonging to the UMATILLA COUNTY SHERIFF'S OFFICE. This information may be confidential and/or legally privileged and is intended only for the use of the addressee designated above. If you are not the intended recipient, you are hereby notified that disclosure, copying, distribution, or the taking of any action due to the contents of this e-mailed information is strictly prohibited. If you have received this e-mail in error, please notify the sender immediately.

(b) (6), (b) (7)(C)

Umatilla County Sheriff's Office

4700 NW Pioneer Place Pendleton, OR 97801 Desk: 541-966-3630

(b) (6), (b) (7)(C)



From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: RE: OE/AAA login Duncan Police Department (OK)

 Date:
 Friday, July 15, 2016 10:21:00 AM

 Attachments:
 Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

image001.jpg

(b) (6), (b) (7)(C)

I am a contractor with (b) (6)

Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air

Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that
are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated
by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts,
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Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

DEVELOPING A UAS PROGRAM

UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

Concept of Operation (ConOps) -The type of sUAS required depends upon an agency's ConOps which can describe a proposed <u>system</u> from the viewpoint of the mission and people who will use it. The ConOps expresses what the Incident Commander intends to accomplish and how it will be done using available resources. ConOps can be developed in different ways, but usually share the same properties. In general, a ConOps include:

Statement of the goals and objectives of the system

- Strategies, tactics, policies, and constraints affecting the system
- Organizations, activities, and interactions among participants and stakeholders
- Clear statement of responsibilities and authorities delegated
- Specific operational processes for fielding the system
- Processes for initiating, developing, maintaining, and retiring the system

Assess the technologies available that meet your concept of operation.

- Web search technologies available
- Communicate with other agencies utilizing UASs
- Contact manufactures that will meet your needs
- Understand city, county, state and federal laws surrounding the utilization of UASs

Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:

- Analysis Summary
- Project Overview and Background
- Discussion of Alternatives
- Alternatives Goals and Concepts
- Life-Cycle Costs and Benefits
- Risk Analysis
- Cost/Benefit Analysis
- Project Cost/Benefit Analysis
- Review/approval Signatures

Community Acceptance- The benefits of sUAS technology can quickly become over-shadowed by controversy surrounding its use if the community is not educated on the benefits and operational controls that are in place. Topics of discussion should include:

- legal guidelines for use of airborne technology
- A community engagement plan
- Compliance with City, County, State and federal policies, ordinances and laws.

ACCESS TO COA ON LINE

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components) including the UAS registration.
- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to

register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see http://www.faa.gov/licenses_ certificates /aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

WHAT COA(s) ARE RIGHT FOR YOUR AGENCY

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- Blanket Area Public Safety (BAPS) COA- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
 - (1) At or below 400 feet AGL; and
 - (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency

and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

- 3. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).
- 4. <u>Emergency COA</u>- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public

agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS) Air Traffic and Law Enforcement Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations, Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: Reyes-Garcia, Dina (FAA) Sent: Friday, July 15, 2016 4:42 AM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: OE/AAA login

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. Steve Pansky, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Tuesday, July 12, 2016 12:21 PM

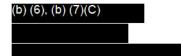
To: Reyes-Garcia, Dina (FAA) Subject: FW: OE/AAA login

I am emailing you in response to the below email. If you need any further information please let me know.

Thank you

- Duncan Police Department
 South 7th Street
 Duncan, OK 73533
- 2. DJI Inspire 1 (meeting the requirements of FAA sUAS) with thermal imagery
- The UAS will be used to aid in the assistance of law enforcement activity including but not limited to: Active shooter scenarios, Crime/Accident scene analysis, surveillance, bomb monitoring, search and rescue missions, fleeing fugitives and active fire investigations.

Criminal Investigation Division
Detective James J. Egger
18 South 7th Street
Duncan, OK 73533



From: oeaaa_helpdesk [mailto:oeaaa_helpdesk@cghtech.com]

Sent: Tuesday, July 12, 2016 9:50 AM

To: (b) (6), (b) (7)(C)

Subject: RE: OE/AAA login

Thank you for contacting the OE/AAA Support Desk regarding the completion of a Public (governmental/educational) COA.

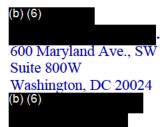
<u>Dina.Reyes-Garcia@faa.gov</u> is the on-line COA administrator and will provide you with the necessary credentials needed for the system access. Please e-mail her the following for her to provide you with a COA username:

- 1. The name of the public entity
- 2. Small description of the UAS
- 3. The concept of the operation (a paragraph will suffice)

Once you have received login credentials you will be filing your COAs at:

https://ioeaaa.faa.gov/oeaaa

Should you have additional questions please do not hesitate to contact us. Have a great day!



(b) (6), (b) (7)(C)

Web Site: www.cghtech.com



Providing

"Satisfaction through Quality" ... with every solution.

This electronic mail message and any attached files contain information intended for the exclusive use of the individual or entity to whom it is addressed and may contain information that is proprietary, privileged, confidential and/or exempt from disclosure under applicable law. If you are not the intended recipient, you are hereby notified that any viewing, copying, disclosure or distribution of this information may be subject to legal restriction or sanction. Please notify the sender, by electronic mail or telephone, of any unintended recipients and delete the original message without making any copies.

Go Green! Print this email only when necessary. Thank you for helping CGH be environmentally responsible.

From: (b) (6), (b) (7)(C)

Sent: Tuesday, July 12, 2016 9:59 AM

To: oeaaa_helpdesk < oeaaa helpdesk@cghtech.com >

Subject: OE/AAA login

How do I obtain a login for the OE/AAA system? I am interested in applying for COA's.

Criminal Investigation Division

(b) (6), (b) (7)(C)

18 South 7th Street Duncan, OK 73533

(b) (6), (b) (7)(C)

From: (b) (6)

To: (b) (6), (b) (7)(C)

Stayonton John (FAA)

Cc: <u>Steventon, John (FAA)</u>

Subject: RE: Public COA application Rutherford County (TN) Sheriff"s Office

Date: Friday, June 24, 2016 9:16:00 PM

Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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INTRODUCTION

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- 4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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----Original Message----

From: Reyes-Garcia, Dina (FAA) Sent: Friday, June 24, 2016 5:13 AM

 T_0 : (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Public COA application

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message----

From: (b) (6), (b) (7)(C)

Sent: Thursday, June 23, 2016 2:45 PM

To: Reyes-Garcia, Dina (FAA) Subject: Public COA application

Hi Dina,

My name is (b) (6), (b) (7)(C)

I work for the Rutherford County Sheriff's Office in Murfreesboro, TN.

We have purchased a UAS and want to use it for documenting outdoor crime scenes.

Rutherford County is approximately 650 square miles of uncontrolled airspace, with the exception of the city of Smyrna. The city of Smyrna is a municipality and we would not be using the aircraft in that area.

The aircraft is a Yuneec Typhoon 500Q 4k

I have been chosen as the person responsible for this program based upon my years of model aircraft experience. I have been researching UAS operation requirements and will be training another detective to be the observer and/or operator.

Please provide me with the necessary contact information and or links to start the application process.

We are excited to begin using our UAS for documenting outdoor crime scenes.

Thank you,

(b) (6), (b) (7)(C)

Rutherford County Sheriff's Office 940 New Salem Highway Murfreesboro, TN. 37129

(b) (6), (b) (7)

Do not forward without the express written permission of the above- named author of this message. The information and/or attachments in this E-mail message is confidential and intended only for the use of its intended recipient. If you, the reader of this message, are not the intended recipient, you are hereby notified that you should not further disseminate, distribute, or forward this E-mail message. If you have received this E-mail in error, please notify the sender and destroy the message. Thank You.

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: RE: Request for COA Access Surf City (NC) Police Department

Date: Thursday, June 23, 2016 3:47:00 PM Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

Detective(b) (6), (b) (7)(C)

I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

- 1. Concept of Operation (ConOps) -The type of sUAS required depends upon an agency's ConOps which can describe a proposed <u>system</u> from the viewpoint of the mission and people who will use it. The ConOps expresses what the Incident Commander intends to accomplish and how it will be done using available resources. ConOps can be developed in different ways, but usually share the same properties. In general, a ConOps include:
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 - Strategies, tactics, policies, and constraints affecting the system
 - Organizations, activities, and interactions among participants and stakeholders

- Clear statement of responsibilities and authorities delegated
- Specific operational processes for fielding the system
- Processes for initiating, developing, maintaining, and retiring the system
- 2. Assess the technologies available that meet your concept of operation.
 - Web search technologies available
 - Communicate with other agencies utilizing UASs
 - Contact manufactures that will meet your needs
 - Understand city, county, state and federal laws surrounding the utilization of UASs
- 3. Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:
 - Analysis Summary
 - Project Overview and Background
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 - Alternatives Goals and Concepts
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 - Risk Analysis
 - Cost/Benefit Analysis
 - Project Cost/Benefit Analysis
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- 4. Community Acceptance- The benefits of sUAS technology can quickly become over-shadowed by controversy surrounding its use if the community is not educated on the benefits and operational controls that are in place. Topics of discussion should include:
 - legal guidelines for use of airborne technology
 - A community engagement plan
 - Compliance with City, County, State and federal policies, ordinances and laws.

ACCESS TO COA ON LINE

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components) including the UAS

registration.

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- Blanket Area Public Safety (BAPS) COA- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
 - (1) At or below 400 feet AGL; and
 - (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

3. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the

construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).

4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, June 22, 2016 8:46 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: FW: Request for COA Access

Importance: High

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: oeaaa_helpdesk [mailto:oeaaa_helpdesk@cghtech.com]

Sent: Tuesday, June 21, 2016 3:40 PM

To: Reyes-Garcia, Dina (FAA)

Subject: FW: Request for COA Access

Hi Dina,

It looks like this User mistakenly sent us his COA information.

(b) (6)

From: (b) (6), (b) (7)(C)

Sent: Tuesday, June 21, 2016 3:38 PM

To: oeaaa_helpdesk < oeaaa_helpdesk@cghtech.com >

Subject: Request for COA Access

Hello,

I am writing to request access to the COA portal. Below is the information that I was informed is required to set up access.

Name of Public Entity - Town of Surf City, Police Department

Description - DJI Phantom 4

Concept of Operation -

We are looking to implement the UAS project to augment police response to incidents within the jurisdiction. Some of these responses include; Missing person calls (general), missing person calls (ocean front), distressed boater/swimmer (near/in shore), traffic accident investigation, traffic congestion monitoring, damage assessment missions, aerial crime scene documentation, and general incident intel operations.

I hope that this information is sufficient, however, should you require more information, please let me know!

Regards,



Criminal Investigations Division (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

Email to and from this address is subject to North Carolina Public Records Law. All correspondence is open to discovery by third parties upon request. Information herein is Restricted for Law Enforcement Use Only. Do not forward this email nor disseminate in any way without prior permission.

From: (b) (6) To: (b) (6), (b) (7)(C)

Subject: RE: Thank you

Date: Thursday, July 07, 2016 10:23:00 AM Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

image001.jpg

So below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

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WHAT COA(s) ARE RIGHT FOR YOUR AGENCY

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- 1. <u>Blanket Area Public Safety (BAPS) COA</u>- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
 - (1) At or below 400 feet AGL; and
 - (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska

Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.

- a) 5 nautical miles (NM) from an airport having an operational control tower; or
- b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
- c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
- d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

- 3. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).
- 4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Thursday, July 07, 2016 7:00 AM

To: (b) (6)

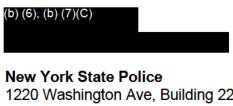
Subject: Thank you

Good morning,

Thank you for taking the time to speak with me this morning. Please send me the most up to date information that you have available that may help us get our UAS program up and running.

Thank you,

(b) (6), (b) (7)



1220 Washington Ave, Building 22, Albany, NY 12226-2252

(b) (6), (b) (7)(C) www.troopers.ny.gov SP Branding

CONFIDENTIALITY NOTICE: This e-mail, including any attachments, may contain highly sensitive and confidential information. It is intended only for the individual(s) named. If you received this e-mail in error or from someone who was not authorized to send it to you, do not disseminate, copy or otherwise use this e-mail or its attachments. Please notify the sender immediately by reply e-mail and delete the e-mail from your system.

From: To: (b) (6), (b) (7)(C) Cc: Steventon, John (FAA)

Subject: FW: COA operating an unmanned aircraft in the national airspace system Starr County (TX) Attorney"s Office

Date: Monday, July 25, 2016 3:07:00 PM Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

Importance: High

(b) (6), (b) (7)

I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

DEVELOPING A UAS PROGRAM

UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

- Concept of Operation (ConOps) -The type of sUAS required depends upon an agency's ConOps which can describe a proposed system from the viewpoint of the mission and people who will use it. The ConOps expresses what the Incident Commander intends to accomplish and how it will be done using available resources. ConOps can be developed in different ways, but usually share the same properties. In general, a ConOps include:
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- Strategies, tactics, policies, and constraints affecting the system
- Organizations, activities, and interactions among participants and stakeholders
- Clear statement of responsibilities and authorities delegated
- Specific operational processes for fielding the system

- Processes for initiating, developing, maintaining, and retiring the system
- 2. Assess the technologies available that meet your concept of operation.
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- Communicate with other agencies utilizing UASs
- Contact manufactures that will meet your needs
- Understand city, county, state and federal laws surrounding the utilization of UASs
- 3. Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:
- Analysis Summary
- Project Overview and Background
- Discussion of Alternatives
- Alternatives Goals and Concepts
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- Risk Analysis
- Cost/Benefit Analysis
- Project Cost/Benefit Analysis
- Review/approval Signatures
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ACCESS TO COA ON LINE

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components) including the UAS registration.
- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that it will be operated and maintained in strict compliance with the public agencies certification criteria.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).

- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see http://www.faa.gov/licenses certificates /aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

WHAT COA(s) ARE RIGHT FOR YOUR AGENCY

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- 1. Blanket Area Public Safety (BAPS) COA- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
- a) 5 nautical miles (NM) from an airport having an operational control tower; or
- b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
- c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
- d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

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For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

- 3. Jurisdictional COA- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).
- 4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the

COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS) Air Traffic and Law Enforcement (b) (6)
Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations, Emerging Technologies Team, AFS-85/AJV-115 (b) (6)

(b) (6)

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----Original Message-----

From: Reyes-Garcia, Dina (FAA) Sent: Monday, July 25, 2016 11:22 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA Importance: High

(b) (6), (b) (7)

I apologize for the delay in the response. Your email was sent to my junk mailbox.

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message----

 F_{rom} (b) (6), (b) (7)(C)

Sent: Monday, July 18, 2016 12:45 PM

To: Reyes-Garcia, Dina (FAA)

Subject: COA

Greetings!

We are requesting your assistance and information regarding the Certificate Of Authority for a UAS. We are the Office of the Starr County Attorney based out of the Starr County Courthouse in Rio Grande City, TX. Our UAS is a DJI Inspire 1. It is a quadcopter with a flying time of approximately 22 minutes with the original 4k photo/video camera attached. We have already registered the UAS with FAA.

(b) (6)

Starr County is situated in Deep South Texas along the US/Mexico border covering 1,229 square miles of mostly rural ranch area. Our population is at approximately 65,000 and there are limited local law enforcement resources. There are no major operational airports in Starr County. The closest major airport is in the neighboring county of Hidalgo in the City of McAllen. It is about 22 miles east of our county line. We have a need for a UAS to locate people in the rural brush area during emergency situations. The most common emergency within this scenario is when an undocumented immigrant attempts to evade authorities by walking through the brush. We often receive calls from such persons requesting emergency care due to heat exhaustion after becoming lost. It is incredibly

difficult to locate these people on foot even when we have GPS coordinates from their cell phones. In fact, many of these people have died. This has been covered by major media outlets. The other scenario deals with individuals fleeing from law enforcement who many times end up crashing through ranch gates to hide in the brush. Every police agency in Starr County relies on the other for assistance regardless of jurisdiction due to limited manpower. We could also be of assistance to our fire departments in surveying brush fires which have been numerous lately. We currently do not have fire fighting aircraft in Starr County and we have never seen one operate anywhere in Deep South Texas. I have become very familiar with our UAS by practicing flying and researching materials. We intend on purchasing a thermal imaging camera for this UAS if we are granted a COA in furtherance of search and rescue operations.

(b) (6), (b) (7)(C) Starr County Attorney's Office (b) (6), (b) (7)(C) From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA)

Subject: FW: Sheriff Office Emergency Management/SAR Operations of UAV

Date: Friday, July 15, 2016 2:42:00 PM

(b) (6), (b) (7)(C)

I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The 333 exemption program will soon be replaced with the recently enacted 14CFR part 107 that allows for the civil use of small unmanned aircraft systems. You can learn about that program at the FAA Web Site https://www.faa.gov/uas/getting_started/fly_for_work_business/becoming_a_pilot/. For those public agencies that wished to operate as a public aircraft operator (the public agency is not restricted from flying SAR or public first responder missions under the civil program) they would apply for a certificate of Waiver/Authorization (COA) described below.

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The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight.

Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing

processes and programs, it is the responsibility of each public entity to determine these processes and programs.

WHAT COA(s) ARE RIGHT FOR YOUR AGENCY

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- 1. <u>Blanket Area Public Safety (BAPS) COA</u>- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
 - (1) At or below 400 feet AGL; and
 - (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

3. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note:

The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).

4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: 9-AFS-UAS-Inquiries (FAA) Sent: Friday, July 15, 2016 11:29 AM

To: (b) (6)

Subject: FW: Sheriff Office Emergency Management/SAR Operations of UAV



(b) (6) here. This is an old one from a sheriff. Predates the release of 107. (b) (6) suggested I forward it on to you.

Regards,

FAA UAS Integration Office

9-AFS-UAS-Inquiries@faa.gov www.faa.gov/uas

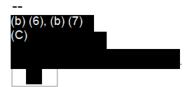
From: (b) (6), (b) (7)(C)

Sent: Wednesday, May 04, 2016 1:58 PM

To: 9-AFS-UAS-Inquiries (FAA)

Subject: Sheriff Office Emergency Management/SAR Operations of UAV

Does flight of a drone in SAR and/or Sheriff Office Emergency Management require a Form 333 Exemption? Use would be non-commercial for emergency operations in earthquakes, tsunami, etc. Thank you. Mark



From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: (b) (6)

Subject: RE: 2016-WSA-147: Approved

Date: Tuesday, July 26, 2016 12:35:00 PM

Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

As an introduction, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Unlike a Non-first responder public safety agency, a law enforcement, fire or first responder agency needs to have the ability to respond rapidly to events and they do not have the time to request waivers to night operations, access to classes of airspace that typically are not approved or relief from NOTAM notification requirements. We have developed a specific program for these type of first responder agencies that give them that ability to meet their mission. Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at. And please understand that this is for those agencies that are just starting out. It is understood that you have completed a considerable amount of the items addressed below.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

DEVELOPING A UAS PROGRAM

UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

1. Concept of Operation (ConOps) -The type of sUAS required depends upon an agency's ConOps which can describe a proposed system from the viewpoint of the mission and people who will use it. The

ConOps expresses what the Incident Commander intends to accomplish and how it will be done using available resources. ConOps can be developed in different ways, but usually share the same properties. In general, a ConOps include:

- Statement of the goals and objectives of the system
- Strategies, tactics, policies, and constraints affecting the system
- Organizations, activities, and interactions among participants and stakeholders
- Clear statement of responsibilities and authorities delegated
- Specific operational processes for fielding the system
- Processes for initiating, developing, maintaining, and retiring the system
- 2. Assess the technologies available that meet your concept of operation.
- Web search technologies available
- Communicate with other agencies utilizing UASs
- Contact manufactures that will meet your needs
- Understand city, county, state and federal laws surrounding the utilization of UASs
- 3. Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:
- Analysis Summary
- Project Overview and Background
- Discussion of Alternatives
- Alternatives Goals and Concepts
- Life-Cycle Costs and Benefits
- Risk Analysis
- Cost/Benefit Analysis
- Project Cost/Benefit Analysis
- Review/approval Signatures
- 4. Community Acceptance- The benefits of sUAS technology can quickly become over-shadowed by controversy surrounding its use if the community is not educated on the benefits and operational controls that are in place. Topics of discussion should include:
- legal guidelines for use of airborne technology
- A community engagement plan
- Compliance with City, County, State and federal policies, ordinances and laws.

ACCESS TO COA ON LINE

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link

Communication and any FAA Technical Standard Order (TSO) components) including the UAS registration.

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that it will be operated and maintained in strict compliance with the public agencies certification criteria.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a ... "What will you do if something bad happens?).
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Respectfully,

(b) (6)

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115

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From: (b) (6)
Sent: Tuesday, July 26, 2016 9:02 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: 2016-WSA-147: Approved

In that case, I would recommend you contact (b) (6) to obtain a "First Responders" COA.

Your Blanket Area COA does not allow for night time operations. I believe the First Responders COA allows for that but (b) (6) can help you with that. I have cc'ed him on this email.

(b) (6)

From: (b) (6), (b) (7)(C)

Sent: Tuesday, July 26, 2016 11:40 AM

To: (b) (6)

Subject: RE: 2016-WSA-147: Approved

Thanks John. I should have been more specific. A UAV or two might be registered to the City but used by the Police department so that would include nighttime operations or operations that would require a warrant.

(b) (6), (b) (7)(C)

City of Auburn

Innovation and Technology

(b) (6), (b) (7)(C)

From: (b) (6)

Sent: Tuesday, July 26, 2016 8:35 AM

To: (b) (6), (b) (7)(C)

Subject: RE: 2016-WSA-147: Approved

Hi(b) (6), (b) (7)(C)

You are not required to make any changes to your Blanket Area COA as long as the new UAV weighs less than 55 lbs. and is properly registered. If your new UAV weighs more than 55 lbs. or more, then you will be required to get a new COA.

Thanks, John

From: (b) (6), (b) (7)(C)

Sent: Friday, July 22, 2016 9:38 AM

To: (b) (6)

Subject: RE: 2016-WSA-147: Approved

If we purchase another UAV, how do we add it to this COA or do we have to file another one?

(b) (6), (b) (7)(C)

City of Auburn

Innovation and Technology

(b) (6), (b) (7)(C)

From: (b) (6)

Sent: Friday, July 22, 2016 3:47 AM

To: (b) (6), (b) (7)(C)

Subject: 2016-WSA-147: Approved

Good Morning

(b) (6), (b) (7)(C)

Please find attached the Blanket Area Public COA for the City of Auburn, Washington.

If you have any questions please contact me.

Thanks and have a great day. John

John D. Rush
UAS Tactical Operations Section, AJV-115
COA Section Processing
470 L'Enfant Plaza SW, Suite 7105
Washington, DC 20024
202-267-4762 (o)

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Cc: Steventon, John (FAA)

Subject: RE: City sUAS program Fort Worth Police Department

Date: Wednesday, July 27, 2016 4:04:00 PM

Attachments: <u>image001.jpg</u>

Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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- Clear statement of responsibilities and authorities delegated
- Specific operational processes for fielding the system
- Processes for initiating, developing, maintaining, and retiring the system
- 2. Assess the technologies available that meet your concept of operation.
 - Web search technologies available
 - Communicate with other agencies utilizing UASs
 - Contact manufactures that will meet your needs
 - Understand city, county, state and federal laws surrounding the utilization of UASs
- 3. Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:
 - Analysis Summary
 - Project Overview and Background
 - Discussion of Alternatives
 - Alternatives Goals and Concepts
 - Life-Cycle Costs and Benefits
 - Risk Analysis
 - Cost/Benefit Analysis
 - Project Cost/Benefit Analysis
 - Review/approval Signatures
- 4. Community Acceptance- The benefits of sUAS technology can quickly become over-shadowed by controversy surrounding its use if the community is not educated on the benefits and operational controls that are in place. Topics of discussion should include:
 - legal guidelines for use of airborne technology
 - A community engagement plan
 - Compliance with City, County, State and federal policies, ordinances and laws.

ACCESS TO COA ON LINE

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link

Communication and any FAA Technical Standard Order (TSO) components) including the UAS registration.

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_ certificates /aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently three different types of COAs to address the needs of the proponent.

- 1. <u>Blanket Area Public Safety (BAPS) COA</u>- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
 - (1) At or below 400 feet AGL; and
 - (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application can be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).

Like the Blanket Area COA the jurisdictional COA has a provision that requires the Public Agency to conduct training at training locations that allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.). Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA.

3. <u>Emergency COA</u>- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one

time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

(h) (6)

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: (b) (6), (b) (7)(C)

Sent: Wednesday, July 27, 2016 7:17 AM

To: (b) (6) Cc: (b) (6)

Subject: City sUAS program

(b) (6)

pursue a sUAS program. I attended a class at the National Technical Investigators Association annual conference taught by Kenneth Young at Lockheed-Martin about how to establish a sUAS program. He recommended that I contact you with my questions to start the process to get approved for a training COA and part 107 rules.

I would like to either set up a time for myself and my chain of command to speak with you over a conference call or to meet face to face with you or a local representative on the subject.

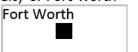
Thank you very much for your time,



Fort Worth Police Department Tactical Intelligence Division

(b) (6), (b) (7)(C)

City of Fort Worth — Working together to build a strong community.



From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: ; Steventon, John (FAA)

Subject: RE: COA

Date: Monday, July 25, 2016 3:01:00 PM
Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)

Apologize for that. You got copied on the email coordination we do in house when a request for information comes into the office. So, I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

DEVELOPING A UAS PROGRAM

UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

- 1. Concept of Operation (ConOps) -The type of sUAS required depends upon an agency's ConOps which can describe a proposed system from the viewpoint of the mission and people who will use it. The ConOps expresses what the Incident Commander intends to accomplish and how it will be done using available resources. ConOps can be developed in different ways, but usually share the same properties. In general, a ConOps include:
- Statement of the goals and objectives of the system
- Strategies, tactics, policies, and constraints affecting the system
- Organizations, activities, and interactions among participants and stakeholders
- Clear statement of responsibilities and authorities delegated
- Specific operational processes for fielding the system

- Processes for initiating, developing, maintaining, and retiring the system
- 2. Assess the technologies available that meet your concept of operation.
- Web search technologies available
- Communicate with other agencies utilizing UASs
- Contact manufactures that will meet your needs
- Understand city, county, state and federal laws surrounding the utilization of UASs
- 3. Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:
- Analysis Summary
- Project Overview and Background
- Discussion of Alternatives
- Alternatives Goals and Concepts
- Life-Cycle Costs and Benefits
- Risk Analysis
- Cost/Benefit Analysis
- Project Cost/Benefit Analysis
- Review/approval Signatures
- 4. Community Acceptance- The benefits of sUAS technology can quickly become over-shadowed by controversy surrounding its use if the community is not educated on the benefits and operational controls that are in place. Topics of discussion should include:
- legal guidelines for use of airborne technology
- A community engagement plan
- Compliance with City, County, State and federal policies, ordinances and laws.

ACCESS TO COA ON LINE

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components) including the UAS registration.
- An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that it will be operated and maintained in strict compliance with the public agencies certification criteria.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).

- An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see http://www.faa.gov/licenses certificates /aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

WHAT COA(s) ARE RIGHT FOR YOUR AGENCY

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- 1. Blanket Area Public Safety (BAPS) COA- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
- (1) At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
- a) 5 nautical miles (NM) from an airport having an operational control tower; or
- b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
- c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
- d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

- 3. Jurisdictional COA- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).
- 4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the

COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Aviation Safety (AVS) Safety Technical Support Services (STSS)
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115
(b) (6)

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----Original Message----From: (b) (6), (b) (7)(C) Sent: Monday, July 25, 2016 11:20 AM

To: (b) (6)

Subject: RE: COA

This may have been sent to me in error, but if there is anything I can do to assist please let me know.

Thank You

(b) (6), (b) (7)(C) Naperville Fire Department (b) (6), (b) (7)(C)

-----Original Message-----

From: (b) (6)

Sent: Monday, July 25, 2016 1:09 PM

 $T_{O:}$ (b) (6)

Cc: (b) (6), (b) (7)(C)

Subject: RE: COA

Yes. I will handle this one.

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS) Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations, Emerging

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----Original Message----

From: (b) (6)

Sent: Monday, July 25, 2016 10:54 AM

 $T_{O:}$ (b) (6)

Subject: FW: COA Importance: High

Hi (b) (6)

This one sounds like you of yours. If not, let me know and I'll take it.

Thanks,

John

----Original Message-----

From: Reyes-Garcia, Dina (FAA) Sent: Monday, July 25, 2016 11:22 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA Importance: High

(b) (6), (b) (7)(C)

I apologize for the delay in the response. Your email was sent to my junk mailbox.

Thank you. Your case has been assigned to (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Monday, July 18, 2016 12:45 PM

To: Reyes-Garcia, Dina (FAA)

Subject: COA

Greetings!

We are requesting your assistance and information regarding the Certificate Of Authority for a UAS. We are the Office of the Starr County Attorney based out of the Starr County Courthouse in Rio Grande City, TX. Our UAS is a DJI Inspire 1. It is a quadcopter with a flying time of approximately 22 minutes with the original 4k photo/video camera attached. We have already registered the UAS with FAA.

(b) (6)

Starr County is situated in Deep South Texas along the US/Mexico border covering 1,229 square miles of mostly

rural ranch area. Our population is at approximately 65,000 and there are limited local law enforcement resources. There are no major operational airports in Starr County. The closest major airport is in the neighboring county of Hidalgo in the City of McAllen. It is about 22 miles east of our county line. We have a need for a UAS to locate people in the rural brush area during emergency situations. The most common emergency within this scenario is when an undocumented immigrant attempts to evade authorities by walking through the brush. We often receive calls from such persons requesting emergency care due to heat exhaustion after becoming lost. It is incredibly difficult to locate these people on foot even when we have GPS coordinates from their cell phones. In fact, many of these people have died. This has been covered by major media outlets. The other scenario deals with individuals fleeing from law enforcement who many times end up crashing through ranch gates to hide in the brush. Every police agency in Starr County relies on the other for assistance regardless of jurisdiction due to limited manpower. We could also be of assistance to our fire departments in surveying brush fires which have been numerous lately. We currently do not have fire fighting aircraft in Starr County and we have never seen one operate anywhere in Deep South Texas. I have become very familiar with our UAS by practicing flying and researching materials. We intend on purchasing a thermal imaging camera for this UAS if we are granted a COA in furtherance of search and rescue operations.

(b) (6), (b) (7)(C) Starr County Attorney's Office (b) (6), (b) (7)(C) From: (b) (6)
To: (b) (6), (b) (7)

Cc: Rigol, Henry (FAA); Steventon, John (FAA)

Subject: RE: FAA COA Request: St. Johns County, FL

 Date:
 Friday, July 22, 2016 4:55:00 PM

 Attachments:
 Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

image001.png

(b) (6), (b) (7)(C)

Mr. Rigol has accepted a position with another FAA organization and I am the only point of contact for coordination of law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

Below is the <u>latest information</u> (including updated 8900.1) we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

DEVELOPING A UAS PROGRAM

UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

- 1. Concept of Operation (ConOps) -The type of sUAS required depends upon an agency's ConOps which can describe a proposed <u>system</u> from the viewpoint of the mission and people who will use it. The ConOps expresses what the Incident Commander intends to accomplish and how it will be done using available resources. ConOps can be developed in different ways, but usually share the same properties. In general, a ConOps include:
 - Statement of the goals and objectives of the system
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- 2. Assess the technologies available that meet your concept of operation.
 - Web search technologies available
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 - Contact manufactures that will meet your needs
 - Understand city, county, state and federal laws surrounding the utilization of UASs
- 3. Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:
 - Analysis Summary
 - Project Overview and Background
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 - Alternatives Goals and Concepts
 - Life-Cycle Costs and Benefits
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- 4. Community Acceptance- The benefits of sUAS technology can quickly become over-shadowed by controversy surrounding its use if the community is not educated on the benefits and operational controls that are in place. Topics of discussion should include:
 - legal guidelines for use of airborne technology
 - A community engagement plan
 - Compliance with City, County, State and federal policies, ordinances and laws.

ACCESS TO COA ON LINE

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components) including the UAS

registration.

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- Blanket Area Public Safety (BAPS) COA- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
 - (1) At or below 400 feet AGL; and
 - (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

3. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the

construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).

4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: Rigol, Henry (FAA)

Sent: Friday, July 22, 2016 9:46 AM

Subject: FW: FAA COA Request: St. Johns County, FL

Hi Steve,

See below Have a good weekend

Henry Rigol Air Traffic Organization System Operations Security FAA Headquarters Work: (202) 267-8185

From: (b) (6), (b) (7)(C)

Sent: Friday, July 22, 2016 12:30 PM

To: Rigol, Henry (FAA) Cc: (b) (6), (b) (7)

Subject: FW: FAA COA Request: St. Johns County, FL

Good morning,

My agency has a renewed interest in this. Has any of this been updated?

From: Henry.Rigol@faa.gov [mailto:Henry.Rigol@faa.gov]

Sent: Wednesday, October 14, 2015 9:02 AM

To: (b) (6), (b) (7)(C)

Cc: John.Steventon@faa.gov; (b) (6) ; Henry.Rigol@faa.gov

Subject: FAA COA Request: St. Johns County, FL

Good Morning,

As an introduction, I am a Federal Aviation Administration employee assigned to the Unmanned Aircraft Systems Tactical Operations Section, AJV-115. I am one the Air Traffic Office (ATO) coordinators for law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with, (b) (6) and an Air Traffic and Law Enforcement/SAC-EC Liaison and Mr. John Steventon an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency

procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational fire missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

An Airworthiness Release (AWR) statement from the Proponent's accountable
executive acknowledging that the Proponent accepts all responsibility for ensuring
that the UAS is airworthy and that the it will be operated and maintained in strict
compliance with the manufacturer's operational and maintenance
recommendations.

- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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 will be executed at the site in the event of an emergency (this could include
 execution of procedures outlined in the manufacturers supplied operator's flight
 manual, other possible alternative courses of action available for each phase of
 flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual operational missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard
 Operating Procedures (SOPs) for each phase of flight operation from notification
 for deployment through preflight, launch, recovery, post-flight and mission record
 keeping. SOPs must include, at a minimum, emergency procedures and
 standards for expected scenarios (e.g. lost-link, lost communications between VO
 and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
 Management, sterile ground control station protocols, PIC and VO standard
 communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

(www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon, (b) (6) or myself with any questions or if we may be of any further assistance.

Respectfully,

Henry Rigol
Air Traffic Specialist, UAS Tactical Operations
Section AJV-115
FAA Headquarters
Ph 202-267-4013
henry.rigol@faa.gov

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From: (b) (6), (b) (7)(C)

Sent: Thursday, October 08, 2015 8:04 AM

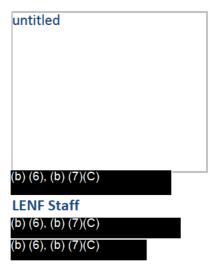
To: Corbett, Danielle (FAA)

Subject: UAS For law Enforcement

Good morning,

The St. Johns County Sheriff's Office is looking to implement a UAS program for use in the legally defined situations. Do you have any information, regulations or other items that would help us set this program up the correct way? If this is not your area can you direct me to some one who might have that information?

Thanks! Have a great day!



Sheriff's Office Main (904) 824-8304

***IMPORTANT MESSAGE/CONFIDENTIAL NOTICE *** This message, including any attachments, is intended for the use of the person or entity to which it is addressed and may contain confidential information. If you received this communication in error, please return the original message to us at the above listed address via electronic mail. Any dissemination, distribution or coping of this information is STRICTLY PROHIBITED

 From:
 (b) (6)

 To:
 9-NATL-UAS-Help (FAA)

 Cc:
 Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: UAShelp@faa.gov Memphis Police Department TN

Date: Thursday, July 21, 2016 9:47:00 PM

Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterparts, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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- An emergency procedures document that explains the protocols/procedures that will be executed at the site in

the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

• Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see http://www.faa.gov/licenses certificates /aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

WHAT COA(s) ARE RIGHT FOR YOUR AGENCY

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- 1. Blanket Area Public Safety (BAPS) COA- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
- At or below 400 feet AGL; and
- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
- a) 5 nautical miles (NM) from an airport having an operational control tower; or
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Under this Blanket Area program the Public Agency will conduct training at training locations that meet the

provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

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The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the

COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: 9-NATL-UAS-Help (FAA)

Sent: Wednesday, July 20, 2016 1:03 PM

 $T_0: (b) (6)$

Subject: FW: Message from www.faa.gov: UAShelp@faa.gov

----Original Message-----

 F_{rom} (b) (6), (b) (7)(C)

Sent: Sunday, July 10, 2016 11:46 AM

To: 9-NATL-UAS-Help (FAA)

Subject: Message from www.faa.gov: UAShelp@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/contact/

Message:

Hello, I work for the Memphis Police Department and we are considering buying a small UA (hobby style) to use for search/rescue and various other activities but not including evidence gathering. I have read a great deal on this site but still not quite clear what we would have to do to become in compliance with the FAA. Could you tell me what forms and credentials we would need? I have read over the flying rules and we would have no issues with those. However, most of Memphis is within 5 miles of the Memphis International Airport. We would have no need to fly anywhere near the 400' mark.

Thank you in advance.

(b) (6), (b) (7)(C)

From: (b) (6) To: (b) (6), (b) (7)

Subject: RE: Public use drone Washington County Sheriff"s Office, OR

Date: Friday, July 22, 2016 7:46:00 PM

Attachments: Order 8900 1 Volume 16.docx
Public Declaration Letter Guidance.doc

Thanks for listening in .

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

DEVELOPING A UAS PROGRAM

UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

- 1. Concept of Operation (ConOps) -The type of sUAS required depends upon an agency's ConOps which can describe a proposed system from the viewpoint of the mission and people who will use it. The ConOps expresses what the Incident Commander intends to accomplish and how it will be done using available resources. ConOps can be developed in different ways, but usually share the same properties. In general, a ConOps include:
- Statement of the goals and objectives of the system
- Strategies, tactics, policies, and constraints affecting the system
- Organizations, activities, and interactions among participants and stakeholders
- Clear statement of responsibilities and authorities delegated
- Specific operational processes for fielding the system
- Processes for initiating, developing, maintaining, and retiring the system
- 2. Assess the technologies available that meet your concept of operation.
- Web search technologies available
- Communicate with other agencies utilizing UASs
- Contact manufactures that will meet your needs
- Understand city, county, state and federal laws surrounding the utilization of UASs
- 3. Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multivolume document but most assessments contain these major areas:
- Analysis Summary

- Project Overview and Background
- Discussion of Alternatives
- Alternatives Goals and Concepts
- Life-Cycle Costs and Benefits
- Risk Analysis
- Cost/Benefit Analysis
- Project Cost/Benefit Analysis
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- 4. Community Acceptance- The benefits of sUAS technology can quickly become over-shadowed by controversy surrounding its use if the community is not educated on the benefits and operational controls that are in place. Topics of discussion should include:
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Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations,
Emerging Technologies Team, AFS-85/AJV-115
(b) (6)

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I attended your presentation at ALEA. Please send me the packet of information regarding operating UASs as public use aircraft.

(b) (6), (b) (7)(C)
Washington County Sheriffs Office, OR

Sent from my iPhone

From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: <u>Steventon, John (FAA)</u>

Subject:RE: Sugar Creek Police Department MODate:Wednesday, July 20, 2016 3:06:00 PM

Attachments: Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

(b) (6), (b) (7)(C)

When last we communicated (January 2016) I provided you with an introduction letter. Well we have updated that email so below is the new information we provide to individuals requesting to operate within the NAS as a public aircraft operator.

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- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).

- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- An emergency procedures document that explains the protocols/procedures that will be executed at
 the site in the event of an emergency (this could include execution of procedures outlined in the
 manufacturers supplied operator's flight manual, other possible alternative courses of action available
 for each phase of flight, and any outside agencies or resources for medical and fire or other
 assistance) Basically, this is a .."What will you do if something bad happens?).
- Registration of the Unmanned aircraft- Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. Public Aircraft are not exempted from the registration requirements. The regulations implementing those requirements are in 14 CFR part 47 for all aircraft, or in 14 CFR Part 48 for small UAS. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. You can register your small UAS under Part 48 by going online at https://registermyuas.faa.gov/ and after registering your agency select the Non-Model button to register your public aircraft. Alternatively, you can register your aircraft under Part 47 using the paper link (see https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/UA/). Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

The public agency will still be required to gain approval from the FAA before operating UAS in the national airspace. However, the public aircraft operator should establish their own training and certification program for their pilots, observers, and aircraft maintenance personnel. When establishing self-certification programs of this kind the government entity conducting the public aircraft operation is responsible for ensuring that the proposed operation can be safely conducted under the terms of their certificate of waiver (COA).

Public operators are encouraged to review Advisory Circular 00-1.1A for information on how to establish internal policies, procedures, protocols and checklists to ensure safety of flight. Additionally, public entities may review pertinent parts of Federal Aviation Regulations (FAR) parts 61, 91, and 107, to familiarize themselves with areas that a certificated pilot must possess knowledge in and follow. The FAA does not prescribe the method that public entities use when developing processes and programs, it is the responsibility of each public entity to determine these processes and programs.

WHAT COA(s) ARE RIGHT FOR YOUR AGENCY

The Unmanned Aircraft Program for public safety was designed to give the proponent a more rapid process for approving UAS operations while expanding the access into the NAS. There are currently four different types of COAs to address the needs of the proponent.

- 1. <u>Blanket Area Public Safety (BAPS) COA</u>- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
 - (1) At or below 400 feet AGL; and

- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
 - a) 5 nautical miles (NM) from an airport having an operational control tower; or
 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
 - d) 2 NM from a heliport

Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

Once this training has been completed, the proponent will be authorized under the same COA to conduct UAS public Safety missions in Compliance with Title 49 USC 40125B at any location within the National Airspace System under the provisions stated within the COA. We believe that utilizing this COA will allow most Public Agencies the ability to meet 75% of their mission objectives.

2. Initial Training COA-

For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

Once that level of training is achieved, the public safety agency can then apply for a Jurisdictional COA to conduct actual UAS missions within a defined operating area (City, County, multiple county area, Etc.).

- 3. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).
- 4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst Aviation Safety (AVS) Safety Technical Support Services (STSS) Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations, Emerging Technologies Team, AFS-85/AJV-115

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. Steve Pansky, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Tuesday, July 19, 2016 11:59 AM

To: Reyes-Garcia, Dina (FAA)

Subject: Sugar Creek Police Department

Good morning Dina,

As per the advice of the help desk I am writing you in attempt to gain access to the FAA COA application system. The below information should be all you need.

- a. The name of the public entity. SUGAR CREEK POLICE DEPARTMENT LOCATED IN MISSOURI
- b. A small description of the UAS. DJI PHANTOM 3 Professional w/camera.
- c. The concept of operation. The Sugar Creek Police Department is in the immediate metro area of Kansas City, Missouri. We intend to use our UAS for rescue and other emergency operations that are common for local Law Enforcement. Furthermore, the Sugar Creek Police Department has close to 20 miles of Missouri River front, much of which is wooded. The UAS would provide vital aerial view of those areas. We have taken measures to insure safety during operations, for example, our operators of the UAS have been through ground school and have a background in remote vehicles.

Your attention with this matter is greatly appreciated,

(b) (6), (b) (7)(C)

Sugar Creek PD Investigations
1001 Heroes Way,
Sugar Creek, MO 64054
(b) (6), (b) (7)(C)

Email: (b) (6), (b) (7)(C)

"Do what you can, with what you have, where you are."

NOTICE-CONFIDENTIAL: This message and any attached files, in their entirety, are intended for the use of the individual and/or entity referenced above and may contain information that is privileged, confidential, and/or exempt from disclosure by applicable law or court order. If the reader of this message is not the intended recipient, please notify the sender via the most expedient means available (contact information precedes this notice.) You are hereby notified that any dissemination, distribution, or copying of this message is strictly prohibited. If you received this message in error, please delete it immediately. To be removed from this list, send an e-mail to the address below. Please leave the subject and message body blank.

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⁻Theodore Roosevelt

e-mail is addressed. If you are not the named recipient, or otherwise have reason to believe that you have received this message in error, please notify the sender at (816) 252-4400 and delete this message immediately from your computer. Any other use, retention, dissemination, forwarding, printing, or copying of this e-mail is strictly prohibited. Additionally, please be advised that (1) e-mail communication is not a secure method of communication, (2) any e-mail that is sent to you or by you may be copied and held by various computers it passes through as it goes from me to you or vice versa, (3) persons not participating in our communication may intercept our communications by improperly accessing your computer or my computer or even some computer unconnected to either of us which the e-mail passed through. If you do not wish to receive communication via e-mail please notify the City of Sugar Creek at once. Thank you

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: RE: UAS FARs

 Date:
 Tuesday, July 26, 2016 8:04:00 AM

 Attachments:
 Order 8900 1 Volume 16.docx

Public Declaration Letter Guidance.doc

image001.png

(b) (6), (b) (7)(C)

Below is the information we provide to individuals and agencies wishing to receive information on how to operate a small unmanned aircraft in the national airspace as a public aircraft operator for a safety agency. This applies to all aircraft regardless of the size and the weight and the altitude they wish to operate at.

INTRODUCTION

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Public Safety Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

DEVELOPING A UAS PROGRAM

DE VELOT INO A GAOT ROOKA

UAS offers a cost-effective alternative to the traditional manned-aviation program for most public safety aviation missions where an airborne asset could be utilized. But before your agency runs out and buys the first "Drone" they see, it is recommended that you prepare for that procurement by doing your homework and getting your community engaged. By developing a clear path to the implementation of your unmanned aircraft program you will be more likely to have a successful outcome.

- 1. Concept of Operation (ConOps) -The type of sUAS required depends upon an agency's ConOps which can describe a proposed <u>system</u> from the viewpoint of the mission and people who will use it. The ConOps expresses what the Incident Commander intends to accomplish and how it will be done using available resources. ConOps can be developed in different ways, but usually share the same properties. In general, a ConOps include:
 - Statement of the goals and objectives of the system
 - Strategies, tactics, policies, and constraints affecting the system
 - Organizations, activities, and interactions among participants and stakeholders
 - Clear statement of <u>responsibilities</u> and <u>authorities</u> delegated
 - Specific operational processes for fielding the system
 - Processes for initiating, developing, maintaining, and retiring the system
- 2. Assess the technologies available that meet your concept of operation.
 - Web search technologies available
 - Communicate with other agencies utilizing UASs
 - · Contact manufactures that will meet your needs

- Understand city, county, state and federal laws surrounding the utilization of UASs
- 3. Cost/Benefit Analysis- Your agency should determine if the benefits to the procurement of this technology makes fiscal sense in these economic challenging times. The analysis can be extremely simple to an extensive multi-volume document but most assessments contain these major areas:
 - Analysis Summary
 - Project Overview and Background
 - Discussion of Alternatives
 - Alternatives Goals and Concepts
 - Life-Cycle Costs and Benefits
 - Risk Analysis
 - Cost/Benefit Analysis
 - Project Cost/Benefit Analysis
 - Review/approval Signatures
- 4. Community Acceptance- The benefits of sUAS technology can quickly become over-shadowed by controversy surrounding its use if the community is not educated on the benefits and operational controls that are in place. Topics of discussion should include:
 - legal guidelines for use of airborne technology
 - A community engagement plan
 - Compliance with City, County, State and federal policies, ordinances and laws.

ACCESS TO COA ON LINE

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. (see attached document)

PREPARING DOCUMENTS FOR THE APPLICATION

The COA on line application process requires that the proponent address several areas that will provide sufficient information for the FAA to make a determination as to the safety of the operations within the NAS. These documents include:

- An executive summary that will describe an overall program objective (ConOps) and an operational summary that addresses the flight mission description the proponent will be executing.
- A System description (description of the UAS technology, the Ground Control Station, Data Link Communication and any FAA Technical Standard Order (TSO) components) including the UAS registration.
- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that it will be operated and maintained in strict compliance with the public agencies certification
 criteria.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).

- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
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FLIGHT AIRCREW QUALIFICATIONS

The Federal Aviation Administration (FAA) has reviewed the Public Aircraft Operator criteria and has clarified the exclusion of government entities conducting Public Aircraft Operations (PAO) for the purpose of fulfilling a government function that meets certain criteria specified under Title 49 United States Code, Section 40102(a)(41) & 40125(a)(2). PAO's are limited by the statute to certain government operations within U.S. airspace and must comply with general operating rules including those applicable to all aircraft in the National Airspace System (NAS). Under this clarification the government entities may exercise their own internal processes regarding aircraft certification, airworthiness, pilot, aircrew, and maintenance personnel certification and training.

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WHAT COA(s) ARE RIGHT FOR YOUR AGENCY

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- 1. <u>Blanket Area Public Safety (BAPS) COA</u>- This Blanket Area Public Safety COA approval will allow small UAS (55 pounds or less) operations during daytime Visual Meteorological Conditions (VMC) conditions under the following limitations:
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- (2) will take place beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or water landing port listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.
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 - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
 - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
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Under this Blanket Area program the Public Agency will conduct training at training locations that meet the provisions of the COA as addressed above that remain well clear of housing areas, roads, any persons, and watercraft. This allows the agency the ability to conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational missions including search and rescue, disaster control, forensic photography, Fire missions, Law Enforcement, etc.).

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For those public safety agencies that need to conduct initial training within airspace that does not conform to the provisions of the blanket area COA, a specific Training COA can be written that identifies a defined operating location (Latitude and longitude Coordinates) or locations within the agencies community where like the blanket area COA the public safety agency can conduct the necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency.

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- 3. <u>Jurisdictional COA</u>- For those operations that cannot operate within the Blanket area COA criteria or wish to expand their access beyond the Blanket Area COA described above, an expanded COA application will be applied for (Jurisdictional COA) which could include operations in Class D, E and C Airspace as well as operations conducted during the night. As part of this COA Application a Safety Risk Analysis Plan (SRAP) will be developed that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS). This SRAP allows the public safety agency to address any risks that may compromise a safe UAS mission well before the need is required to fly such a mission. When the Jurisdictional COA is issued the proponent need only file a Notice to Airman (NOTAM) prior to flight which identifies a defined operating Area (Radial/DME off a known Navigational Aid) within the construct of the Jurisdictional COA Area and a notification to the appropriate Air traffic Control Facility having jurisdictional responsibility over that airspace (If required).
- 4. Emergency COA- And if the proposed operating area is not covered under the public safety agencies approved Blanket Area or Jurisdictional COA the public safety agency can request and receive approval from the FAA for an emergency Certificate of Waiver/Authorization that will allow for the one time operation of the UAS at that location based on an eminent risk to life type event where manned aircraft may need to be diverted or temporarily discontinued.

FIRST STEPS

The first step in getting started is to coordinate with your State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) the need for a public declaration letter that should be mailed to the FAA (see the FAA agency executive name and address). Once that letter has been reviewed by the FAA's legal office and deemed sufficient an on line access form will be forwarded to the point of contact for the public agency to be completed and returned to the FAA. It currently takes approximately 15 business days for the FAA to establish an account within the online program that is partitioned so as to allow for security of the data being entered by the public agency.

FINAL THOUGHTS

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or myself with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Aviation Safety (AVS) Safety Technical Support Services (STSS)

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations,

Emerging Technologies Team, AFS-85/AJV-115

(b) (6)

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From: Steventon, John (FAA)

Sent: Tuesday, July 26, 2016 5:02 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: UAS FARs

(b) (6), (b) (7)(C)

(b) (6) is Cc'ed and will send you a welcome letter with the details necessary for getting your program started. Look forward to working with you.

John

John D. Steventon
Aviation Safety Inspector
HQ, Federal Aviation Administration
Unmanned Aircraft System Integration Office, AFS-84
470 L'Enfant Plaza, Suite 7100, Room 703
Washington DC, 20024

Phone: c(571) 393-0425

E-Mail: john.steventon@faa.gov

From: (b) (6), (b) (7)(C)

Sent: Monday, July 25, 2016 6:10 PM

To: Steventon, John (FAA) **Subject:** UAS FARs

Inspector Steventon,

We spoke briefly at the ALEA convention. I gave you a business card to give to your colleague as I was seeking a simple, bullet-point style list of the FAAs regulations on UASs so that we can be sure to comply with all of them when we start using a new vehicle we purchased for crime-scene mapping. I just wanted to touch base with you so you would have my contact information in case something happened to the business card I gave you. I look forward to your reply.

(b) (6), (b) (7)(C) (b) (6), (b) (7)(C) Victoria County Sheriff's Office (b) (6), (b) (7)(C) badge-transparent

From: (b) (6)
To: (b) (6)

Cc: Morton, David (FAA)

Subject: Follow-up Information on Operating an Unmanned Aircraft System in the National Airspace System

Date: Wednesday, June 04, 2014 12:30:00 PM
Attachments: COA Process Initial Itr Template.doc

N8900 227.pdf



Great to speak with you again today. As I mentioned on the phone I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA UAS requests.

The below information is typically what I send out to Law Enforcement, Fire and first responders who have an interest in operating an unmanned aircraft system in the national airspace system.

So as I mentioned, the Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Responder UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice, 8900.227, which I have attached with this email.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent must provide a letter from the Fire, first responder, Law Enforcement Agency's State, County or City Attorney forwarded to the FAA to formally acknowledge that the Proponent is recognized as a subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). A letter explaining this requirement is attached. Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's legal Office. You must also understand that the Chief, Sheriff or Executive Director from your public agency CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and your agency rests with the State, County or City Attorney General and their appropriate legal counsel.

In addition to the Public declaration letter we have asked the proponent to provide us with some additional information, addressed below, so as to understand the type of UAS program they are wishing to develop and their level of aviation education.

- The Proponent's address and contact information, including the accountable executive's name
- The name and manufacturer of the UAS technology is proposing to use.

- How the Proponent anticipates utilizing the UAS technology (Concept of Operations)
- The level of aviation experience the Proponent has (e.g. does any member of the Proponent's organization hold private or advanced FAA pilot certificate? or an FAA Airman Medical Certificate?, etc.)
- Will the Proponent be developing the UAS program "in house" or utilizing a third party to develop and/or implement its UAS program?

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two-phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits the proponent to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting elements (e.g. coordination for operational missions, search and rescue, disaster control, forensic Photography, etc.).

With the *initial* COA Application, several documents need to be submitted by the Proponent. These documents include:

- An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
- A lost communication procedures document that addresses what actions the Pilot-in-Command (PIC) will take if there is lost communication between PIC and Air Traffic Control, as well as lost communication between PIC and the Visual Observer (VO)
- An emergency procedures document that explains the protocols that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the operator's manual, possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual UAS missions, the Proponent will apply for a second *operational* COA (Phase II) that typically incorporates the fire agency's jurisdiction. As part of the *operational* COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- Review of the agency's UAS training and proficiency program, to include all training records
- Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

As mentioned above, the most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, the County or City District Attorney's office.

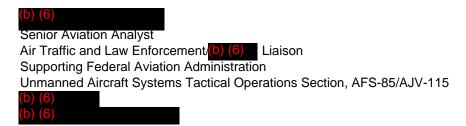
I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance. Additionally I have provided the hyper link that speaks to the film industry's movement to operate UAS in the NAS.

http://www.faa.gov/news/press_releases/news_story.cfm?newsId=16294

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AJV-115
(b) (6)

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From: (b) (6)
To: (b) (6)
Cc: Morton, David (FAA)

Subject: FW: COA Application Login ID
Date: Wednesday, May 28, 2014 4:06:00 PM

Attachments: N8900 227.pdf

COA Process Initial Itr Template.doc

Importance: High

(b) (6)

My name is (b) (6)

. I am a contractor with (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section,

AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First

Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies
that need to be certificated by the FAA in order to operate within the National Airspace System (NAS).

Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned
Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA
UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice, 8900.227, which I have attached with this email.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide some preliminary information that gives us an idea of the type of UAS program you are considering developing and the requirement for a public declaration letter from either the County or State Attorney's Office declaring your public aircraft operator status. The initial information includes but is not limited to:

- The Proponent's address and contact information, including the accountable executive's name (Typically the Chief, Sheriff or Director)
- The name and manufacturer of the UAS technology the proponent is considering utilizing
- How the Proponent anticipates utilizing the UAS technology (Concept of Operations)
- The level of aviation experience the Proponent has (e.g. What is the level of Aviation experience the Proponent has and does the Proponent's organization plan on utilizing employees who hold private or advanced FAA pilot certificate? or an FAA Airman Medical Certificate?, etc.)
- Will the Proponent be developing the UAS program "in house" or utilizing a third party to develop and/or implement its UAS program?

The letter from the agencies County or State Attorney General's office is forwarded to the FAA to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent

will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the County or State Attorney General and their appropriate legal counsel.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With the Initial COA Application, several documents need to be submitted by the Proponent. These documents include:

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- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
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Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- Review of the agency's UAS training and proficiency program, to include all training records
- Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the application.

When your agency has made a determination that they would like to develop a UAS program could you please forward the preliminary information I have identified above (Bold) so I can start the coordination process for access to the COA on-line program. The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or the County District Attorney's office (please review the attached email material on public declarations).

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AJV-115



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From: Reves-Garcia, Dina (FAA)

Sent: Wednesday, May 28, 2014 12:44 PM

To: (b) (6) Cc: (b) (6)

Subject: RE: COA Application Login ID

Importance: High

(b) (6)

Thank you for contacting the FAA. Your email has been forwarded to our UAS POC for Law Enforcement, (b) (6) (cc'ed), who will assist you with your questions and with the COA process.

Thank you.

From: (b) (6)

Sent: Wednesday, May 28, 2014 12:00 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** COA Application Login ID

Hello,

Thank you



From: (b) (6 To: (b) (6

Cc: Morton, David (FAA)

Subject: FW: COA On-Line Access

Date: Thursday, June 05, 2014 2:09:00 PM

Attachments: N8900 227.pdf

COA Process Initial Itr Template.doc

Importance: High

(b) (6)

Great to hear from you again. When we last spoke in April, 2012 I provided you with some information on operating an unmanned aircraft in the national airspace system. SO let me give you the latest information. And as a reminder, I am a contractor with (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice, 8900.227, which I have attached with this email.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide some preliminary information that gives us an idea of the type of UAS program you are considering developing and the requirement for a public declaration letter from either the County or State Attorney's Office declaring your public aircraft operator status. The initial information includes but is not limited to:

- The Proponent's address and contact information, including the accountable executive's name (Typically the Chief, Sheriff or Director)
- · The name and manufacturer of the UAS technology the proponent is considering utilizing
- How the Proponent anticipates utilizing the UAS technology (Concept of Operations)
- The level of aviation experience the Proponent has (e.g. What is the level of Aviation experience the Proponent has and does the Proponent's organization plan on utilizing employees who hold private or advanced FAA pilot certificate? or an FAA Airman Medical Certificate?, etc.)
- Will the Proponent be developing the UAS program "in house" or utilizing a third party to develop and/or implement its UAS program?

The letter from the agencies County or State Attorney General's office is forwarded to the FAA to formally

acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the County or State Attorney General and their appropriate legal counsel.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With the Initial COA Application, several documents need to be submitted by the Proponent. These documents include:

- An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
- A lost communication procedures document that addresses what actions the Pilot-in-Command (PIC) will take if there is lost communication between PIC and Air Traffic Control, as well as lost communication between PIC and the Visual Observer (VO)
- An emergency procedures document that explains the protocols that will be executed at the site in the
 event of an emergency (this could include execution of procedures outlined in the operator's manual,
 possible alternative courses of action available for each phase of flight, and any outside agencies or
 resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- Review of the agency's UAS training and proficiency program, to include all training records
- · Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website

(http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the application.

When your agency has made a determination that they would like to develop a UAS program could you please forward the preliminary information I have identified above (Bold) so I can start the coordination process for access to the COA on-line program. The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or County District Attorney's (please review the attached email material on public declarations).

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)

Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, June 05, 2014 10:58 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA On-Line Access

Importance: High

(b) (6), (b)

Thank you for contacting the FAA. Your email has been forwarded to (b) (6), our POC for Law Enforcement. He will continue to assist you with your questions and the COA process.

Regards, Dina-

From: (b) (6), (b) (7)(C)

Sent: Thursday, June 05, 2014 1:31 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** Fwd: COA On-Line Access

Hello Dina,

I am from the (b) (6) Sheriff's Office in (b) (6) I would like to request access

to apply for a COA for our office. After our initial purchase of a UAV, we will begin testing to determine the scope of it's operation within our department. At this time, I believe the most common use will be crime scenes and major traffic accidents. Also, I have already written a policy directive for the operation of the UAV.

Thank you,

(b) (6)



_____(b) (6)

From: (b) (o), (b) (/)(c)

Date: Thu, Jun 5, 2014 at 12:21 PM Subject: COA On-Line Access

 T_0 : "(b) (6), (b) (7)(C)

(b) (6), (b) (7)

To request COA On-line access to apply for a COA.

Email <u>dina.reves-garcia@faa.gov</u>, the COA On-line administrator with:

The name of the government agency/university that is requesting the COA and the concept of operation.

(b) (6)
Support Desk Staff
(b) (6)
oeaaa helpdesk@cqhtech.com

From: (b) (6)
To: (b) (6)

Cc: Morton, David (FAA)

Subject: FW: COA

Date: Wednesday, May 21, 2014 12:59:30 PM

Attachments: <u>image002.jpg</u>

COA Process Initial Itr Template.doc

N8900 227.pdf

Importance: High



My name is (b) (6)

. I am a contractor with (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section,
AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First
Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies
that need to be certificated by the FAA in order to operate within the National Airspace System (NAS).
Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned
Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA
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Proponent's program

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Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, May 21, 2014 9:05 AM

To: (b) (6)
Subject: COA

Thank you for contacting the FAA UAS office. Your email has been forwarded to our UAS POC for Law Enforcement, (b) (6) who will assist you with your questions.

Description, DDC sign block
Description: DRG sign block

Dina,

I work with the Alabama Law Enforcement Agency. I am looking into obtaining a COA so that we will be able to fly drones that will be used for emergency response in the event of natural disasters, as well as law enforcement operation awareness that will be used during such things as school shootings. If you could please call me at my direct number (b) (6), (b) (7) and let me know what I need to do In order to apply for a COA I would greatly appreciate it.

Thank you so much for your time,

(b) (6), (b)

Application Support/Technical Auditor Information Technology Division



From: (b) (6)
To: (b) (6)

Cc: Morton, David (FAA)
Subject: FW: FW: Account Setup

Date: Wednesday, May 21, 2014 4:54:00 PM

Attachments: <u>image001.jpg</u>

N8900 227.pdf

COA Process Initial Itr Template.doc

Importance: High

(b) (6)

My name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section,
AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First
Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies
that need to be certificated by the FAA in order to operate within the National Airspace System (NAS).
Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned
Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA
UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice, 8900.227, which I have attached with this email.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide some preliminary information that gives us an idea of the type of UAS program you are considering developing and the requirement for a public declaration letter from either the City, County or State Attorney's Office declaring your public aircraft operator status. The initial information includes but is not limited to:

- The Proponent's address and contact information, including the accountable executive's name (Typically the Chief, Sheriff or Director)
- The name and manufacturer of the UAS technology the proponent is considering utilizing
- How the Proponent anticipates utilizing the UAS technology (Concept of Operations)
- The level of aviation experience the Proponent has (e.g. What is the level of Aviation experience the Proponent has and does the Proponent's organization plan on utilizing employee's who hold private or advanced FAA pilot certificate? or an FAA Airman Medical Certificate?, etc.)
- Will the Proponent be developing the UAS program "in house" or utilizing a third party to develop and/or implement its UAS program?

The letter from the agencies City, County or State Attorney office is forwarded to the FAA to formally

acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the City, County or State Attorney and their appropriate legal counsel.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With the Initial COA Application, several documents need to be submitted by the Proponent. These documents include:

- An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
- A lost communication procedures document that addresses what actions the Pilot-in-Command (PIC) will take if there is lost communication between PIC and Air Traffic Control, as well as lost communication between PIC and the Visual Observer (VO)
- · An emergency procedures document that explains the protocols that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the operator's manual, possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- Review of the agency's UAS training and proficiency program, to include all training records
- · Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the application.

When your agency has made a determination that they would like to develop a UAS program could you please forward the preliminary information I have identified above (Bold) so I can start the coordination process for access to the COA on-line program. The most important piece is the public declaration letter that will need to be coordinated through the State, County or City Attorney's office (please review the attached email material on public declarations).

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AJV-115

(b) (6)

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From: Reves-Garcia, Dina (FAA)

Sent: Wednesday, May 21, 2014 12:57 PM

To: (b) (6) Cc: (b) (6)

Subject: FW: Account Setup

Importance: High

Thank you for contacting the FAA UAS office. Your email has been forwarded to our UAS POC for Law Enforcement, (b) (6) , who will assist you with your questions.



From: (b) (6)

Sent: Monday, May 19, 2014 3:19 PM

To: (b) (6)
Subject: Account Setup

Good afternoon,

I'm trying to set up an account to apply for a UAS COA. I've looked around the UAS COA Online System but can't seem to find the right place to set up an account. If you could assist me with that or point me in the right direction, I'd really appreciate it.

Thanks very much,
(b) (6)
(b) (6)
(c) (d) Police Department
(d) (e) (e)
(e) (f)

From: (b) (6 To: (b) (6

Cc: Morton, David (FAA)

Subject: FW: Guidance for certificate for DAS

Date: Tuesday, May 27, 2014 9:12:00 AM

Attachments: N8900 227.pdf

COA Process Initial Itr Template.doc

(b) (6)

Mr. Morton asked me to respond to your questions. By way of introduction my name is (b) (6) am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA UAS requests.

I have underlined two of the answers to your questions and the final answer is you can certainly purchase the UAs before you have approval however you cannot operate the UAs as a public aircraft operator until you have approval from the FAA. Below is the information we typically provide to individuals and organizations interested I operating UASs.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice, 8900.227, which I have attached with this email.

When the FAA receives a COA application through the <u>FAA's "COA On-line" process</u>, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical <u>COA application approval process is completed within 60 business</u> days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide some preliminary information that gives us an idea of the type of UAS program you are considering developing and the requirement for a public declaration letter from the State Attorney's Office declaring your public aircraft operator status. The initial information includes but is not limited to:

- The Proponent's address and contact information, including the accountable executive's name (Typically the Chief, Sheriff or Director)
- The name and manufacturer of the UAS technology the proponent is considering utilizing
- How the Proponent anticipates utilizing the UAS technology (Concept of Operations)
- The level of aviation experience the Proponent has (e.g. What is the level of Aviation experience the Proponent has and does the Proponent's organization plan on utilizing employee's who hold private or advanced FAA pilot certificate? or an FAA Airman Medical Certificate?, etc.)
- Will the Proponent be developing the UAS program "in house" or utilizing a third party to develop and/or implement its UAS program?

The letter from the agencies State Attorney General's office is forwarded to the FAA to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with State Attorney General and their appropriate legal counsel.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With the Initial COA Application, several documents need to be submitted by the Proponent. These documents include:

- An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
- A lost communication procedures document that addresses what actions the Pilot-in-Command (PIC) will take if there is lost communication between PIC and Air Traffic Control, as well as lost communication between PIC and the Visual Observer (VO)
- An emergency procedures document that explains the protocols that will be executed at the site in the
 event of an emergency (this could include execution of procedures outlined in the operator's manual,
 possible alternative courses of action available for each phase of flight, and any outside agencies or
 resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- Review of the agency's UAS training and proficiency program, to include all training records
- Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

(http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the application.

When your agency has made a determination that they would like to develop a UAS program could you please forward the preliminary information I have identified above (Bold) so I can start the coordination process for access to the COA on-line program. The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office (please review the attached email material on public declarations).

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AJV-115

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---- Forwarded by David Morton/AWA/FAA on 05/20/2014 10:38 AM -----

From: (b) (6)
AFS-084, UAS Safety & Data Management Section

To: David Morton/AWA/FAA@FAA, Date: 05/05/2014 11:30 AM

Subject: Guidance for certificate for Swat UAS

Mr. Morton.

I am looking to purchase a small UAS for swat operations such as barricades hostage type situations. I was referred to you as to the best course of action to getting FAA approval. just a couple questions:

What is the exact form to fill out

Should I wait for FAA approval before buying the UAS

Typically how long does approval take

Thank you

State Police Special Operations

This e-mail, including any attachments, may contain highly sensitive and confidential information.

It is intended only for the individual(s) named.

If you received this e-mail in error or from someone who was not authorized to send it to you, do not disseminate, copy or otherwise use this e-mail or its attachments. Please notify the sender immediately by reply e-mail and delete the e-mail from your system.

From: (b) (6)
To: (b) (6)
Cc: Morton David (FAA)

 Subject:
 FW: UAV for Law Enforcement Deployment

 Date:
 Thursday, June 05, 2014 5:26:00 PM

 Attachments:
 COA Process Initial Itr Template.doc

 N8900_227.pdf

Importance: High

(b)

By way of introduc ion, my name is (a) (b) . I am a contractor with Eederal Aviation Administra ion Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA UAS requests.

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When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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- · Will the Proponent be developing the UAS program "in house" or utilizing a third party to develop and/or implement its UAS program?

The letter from the agencies City, County or State Attorney General's office is forwarded to the FAA to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until his declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the City, County or State Attorney General and heir appropriate legal counsel.

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- · An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
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Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

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- Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from no ification for deployment through

preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures

- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique opera ional areas within that jurisdic ion and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mi igate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the application.

When your agency has made a determination that they would like to develop a UAS program could you please forward the preliminary information I have identified above (Bold) so I can start the coordination process for access to the COA on-line program. The most important piece is the public declaration letter that will need to be coordinated hrough the State Attorney General's Office, County District Attorney's office or City Attorney (please review the attached email material on public declarations).

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many guestions hat an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6) Senior Avia ion Analyst

Air Traffic and Law Enforcement Supporting Federal Aviation Administration Unmanned Aircraft Systems Tac ical Operations Section, AJV-115

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From: (6) (6) Sent: Thursday, June 05, 2014 1:10 PM

Reyes-Garcia, Dina (FAA)

Subject: UAV for Law Enforcement Deployment

Importance: High

(b)

I hope this finds you well. And thank you for your patience.

Firstly, to obtain a COA, you will need to set up a COA online account. Please let us know who your COA online account holder will be (if that will be you or someone else).

I have copied (b) (6) , my colleague who handles law enforcement COAs.

Best regards,

From: <u>Dina.Reyes-Garcia@faa.gov</u> [mailto:Dina.Reyes-Garcia@faa.gov]

Sent: Monday, May 05, 2014 12:08 PM Subject: Fw: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Importance: High

Dina Reyes-Garcia Management and Program Analyst Unmanned Aircraft Systems Integra ion Office Federal Aviation Administra ion Washington, DC rded by Dina Reyes-Garcia/AWA/FAA on 05/05/2014 12:07 PM ----

> (b) (6) 04/04/2014 11·19 AM

9-AJV-115-UASCOA/AWA/FAA@FAA.

Subject

Message from www.faa.gov; 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

I would like more information on the status of UAV's for Law Enforcement Deployment. Is a COA required to start the process for approval?



From: (b) (6)

To: (b) (6)

Cc: Morton, David (FAA)

Subject: RE: (b) (6)

Date: Friday, May 30, 2014 10:48:00 AM

Attachments: N8900 227.pdf

COA Process Initial Itr Template.doc

(b) (6)

As an introduction, my name is working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA UAS requests.

The short answer to your question is Yes. Anyone who operates an Unmanned Aircraft (UA) in the National Airspace System (NAS) for use other than hobbyist/recreational purposes needs approval from the Federal Aviation Administration (FAA). That approval for public agencies comes in the form of the Certificate of Waiver/Authorization (COA) and the FAA is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the NAS. Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations however a declaration will need to be provided to the FAA to validate that the agency is actually qualifies as a public agency before we can start the CA on line process. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice, 8900.227, which I have attached with this email.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide the letter from the agencies County or State Attorney General's office which is forwarded to the FAA to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the County or State Attorney General and their appropriate legal counsel.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With

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- An emergency procedures document that explains the protocols that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the operator's manual, possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- · Review of the agency's UAS training and proficiency program, to include all training records
- · Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
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- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the application.

As mentioned, the most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or the County District Attorney's office (please review the attached email material on public declarations).

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

Air Traffic and Law Enforcement/(b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AJV-115
(b) (6)

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From: (b) (6)

Sent: Friday, May 30, 2014 7:29 AM

To: (b) (6)

Subject: (b) (6)

From: (b) (6) 1

To: (b) (6) Cc: Morton, David (FAA)

Subject: UAS in Law Enforcement

Date: Wednesday, May 21, 2014 11:07:33 AM

Attachments: N8900 227.pdf

COA Process Initial Itr Template.doc

(b) (6)

As a way of Introduction my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law
enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned
Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the
National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety
inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement
program resource manager, we handle LEA UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice, 8900.227, which I have attached with this email.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide some preliminary information that gives us an idea of the type of UAS program you are considering developing and the requirement for a public declaration letter from State Attorney's Office declaring your public aircraft operator status. The initial information includes but is not limited to:

- The Proponent's address and contact information, including the accountable executive's name (Typically the Chief, Sheriff or Director)
- · The name and manufacturer of the UAS technology the proponent is considering utilizing
- How the Proponent anticipates utilizing the UAS technology (Concept of Operations)
- The level of aviation experience the Proponent has (e.g. What is the level of Aviation experience the Proponent has and does the Proponent's organization plan on utilizing employee's who hold private or advanced FAA pilot certificate? or an FAA Airman Medical Certificate?, etc.)
- Will the Proponent be developing the UAS program "in house" or utilizing a third party to develop and/or implement its UAS program?

The letter from the agencies State Attorney General's office is forwarded to the FAA to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial

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The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the

application.

When your agency has made a determination that they would like to develop a UAS program could you please forward the preliminary information I have identified above (Bold) so I can start the coordination process for access to the COA on-line program. The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office (please review the attached email material on public declarations).

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

From: (b) (6)
To: (b) (6)

Cc: Morton, David (FAA)

Subject: Flying an Unmanned Aircraft in the National Airspace System

Date: Monday, June 23, 2014 12:56:00 PM

Attachments: N8900 227.pdf

LE Flying an Unmanned Aircraft in the National Airspace System SP06132014.pdf

(b) (6)

Great to speak with you. As I mentioned on the phone my name is (b) (6)

Working for the Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO)
coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in
implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in
order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David
Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO)
National Law Enforcement program resource manager, we handle LEA UAS requests.

I have attached a copy of the FAA's Unmanned Aircraft Systems Operational Approval Notice 8900.227 and a handout we provide to interested agencies at conferences we attend. Below is the typical information we provide to inquiries via email which is what we talked about on the phone.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice.

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Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AJV-115

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From: (b) (6 To: (b) (6

Cc: Morton, David (FAA)

Subject: FW: COA

Date: Tuesday, July 01, 2014 5:34:00 PM
Attachments: COA Process Initial Itr Template.doc

N8900 227.pdf

Importance: High



UAS requests.

email.

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA

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When your agency has made a determination that they would like to develop a UAS program please forward a copy of the public declaration letter directly to me via email so I can start the coordination process (please review the attached email material on public declarations).

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA) Sent: Tuesday, July 01, 2014 8:57 AM

To: (b) (6) Cc: (b) (6)

Subject: RE: COA Importance: High

(b) (6)

Thank you for contacting the FAA. Your email has been forwarded to our Law Enforcement POC, (b) (6) , who will continue to assist you with your request.

Best-Dina.

From: (b) (6)

Sent: Tuesday, July 01, 2014 11:32 AM

To: Reyes-Garcia, Dina (FAA)

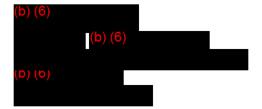
Subject: COA

Good Morning,

My name is (b) (6) and I am a Sergeant with the (b) (6) Police Department. I am currently assigned to our Crime Scene Services Section and also Traffic Crash Reconstruction Services Section. I have been working with a local business on purchasing an autonomous quadcopter to assist with our investigations. What we are trying to accomplish is to use the unit to photograph an aerial view of fatality crashes or outdoor crime scenes for our diagramming and court presentations. I realize there are guidelines that must be adhered to as far as how close we can be from our airport and how high the unit can fly, but I believe we can follow the FAA rules and still accomplish our goals. I believe the highest we would need to have the unit in the air to take accurate photos would be 200 feet, and since our airport is on the far north side of our city we would be able to use the unit within the majority our of city's boundaries. I am requesting permission to access your COA application process so we can request a COA license.

(b) (6)

(b) (6)



From: (b) (6) To: (b) (6)

Cc: Morton, David (FAA)

Subject: FW: (b) (6)

Date: Friday, June 27, 2014 9:12:00 AM
Attachments: COA Process Initial Itr Template.doc

N8900 227.pdf

Importance: High

(b) (6)

My name is (b) (6) ... I am a contractor with (b) (6) ... working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA UAS requests.

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- · Review of the agency's UAS training and proficiency program, to include all training records
- Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from
 notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must
 include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost
 communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
 Management, sterile ground control station protocols, PIC and VO standard communications and any special
 mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or County District Attorney's office (please review the attached email material on public declarations).

Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison

Air Traffic and Law Enforcement Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA) Sent: Friday, June 27, 2014 5:56 AM

To: (b) (6)

Subject: RE: on-line COA application for Prentiss CO, MS

Importance: High

Hi (b) (6),

Thank you for contacting the FAA. Your email has been forwarded to (b) (6) , our Law Enforcement POC, who will continue to assist you with your request.

Best-

Dina.

----Original Message----

From: (b) (6)

Sent: Thursday, June 26, 2014 12:17 PM

To: Reyes-Garcia, Dina (FAA)

Subject: on-line COA application for Prentiss CO, MS

Ma'am.

This email is to request COA On-line access. Below is the information I was instructed to provide. Please let me know if you need anything else or if corrections need to be made.

Name of Requesting Agency:

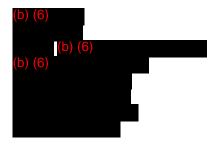


Basic Concept of Operation:

The objective of our program is to create a higher standard of safety for members of our community by utilizing the DraganFlyer X6 Unmanned Aircraft System (UAS) in support of numerous Law Enforcement related functions which could include but are not limited to; crash site investigation related to interstate transport of hazardous materials, crash site investigation related to railroad transport of hazardous materials, Search & Rescue operations, and tactical support of Law Enforcement operations.

Duration of each flight will be approximately 20 minutes, will not exceed a ceiling of 400 feet AGL, and remain within the COA approved airspace. The (b) (6) property mentioned above provides an ideal controlled atmosphere for training, CONOP, standard operating procedure (SOP) and tactics development and validation. The (b) (6) property contains varying terrain, non-occupied vehicles and buildings as well as a long history of incident free operations and proven operating/safety procedures. The COA approved areas will aid in training without risk to people, property or wildlife and allow for the instrumental application of current technology to create a higher standard of safety for members of our community.

Respectfully,



From: (b) (6)
To: (b) (6)

Cc: Morton, David (FAA); Johnson, Wayne D (FAA)

Subject: FW: sUAS

Date: Monday, June 16, 2014 2:21:00 PM

Attachments: FAA Order 8130 34C.pdf

N8900 227.pdf ac91-57.pdf

COA Process Initial Itr Template.doc

(b) (6)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law
enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned
Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the
National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety
inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement
program resource manager, we handle LEA UAS requests.

So the (b) (6) State Police will need a Certificate of Waiver/Authorization (COA) to operate any unmanned aircraft System in the NAS. Under the provisions that were spelled out in the 2012 Reauthorization language, if the proponent met those provisions (Day time VFR operations, line of sight, Class G at or below 400' AGL, greater than 5 Miles from an airport or heliport with an aircraft weighting 4.4 Lbs. or less) the FAA would not disapprove the operation however the language did not speak to the fact that a COA is necessary since the proponent is operating an aircraft without an airworthiness certificate. Also, the language did not speak to the training and medical certifications that are required for the approval of the COA regardless of the weight or size of the UAS.

Currently the only means of operating an unmanned aircraft in the NAS today is either under advisory circular 91-57 and speaks to hobbyist for recreational purposes, a special airworthiness certificate in the experimental category typically for manufactures to accomplish research and development, market survey or pilot training (See 8130.34C) or as a public aircraft operator. Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice, 8900.227, which I have attached with this email.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide some preliminary information that gives us an idea of the type of UAS program you are considering developing and the requirement for a public declaration letter from either the City, County or State Attorney's Office declaring your public aircraft operator status. The initial information includes but is not limited to:

- The Proponent's address and contact information, including the accountable executive's name (Typically the Chief, Sheriff or Director)
- The name and manufacturer of the UAS technology the proponent is considering utilizing
- How the Proponent anticipates utilizing the UAS technology (Concept of Operations)

- The level of aviation experience the Proponent has (e.g. What is the level of Aviation experience the Proponent has and does the Proponent's organization plan on utilizing employees who hold private or advanced FAA pilot certificate? or an FAA Airman Medical Certificate?, etc.)
- Will the Proponent be developing the UAS program "in house" or utilizing a third party to develop and/or implement its UAS program?

The letter from the agencies State Attorney General's office is forwarded to the FAA to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. They must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with State Attorney General and their appropriate legal counsel.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With the Initial COA Application, several documents need to be submitted by the Proponent. These documents include:

- An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
- A lost communication procedures document that addresses what actions the Pilot-in-Command (PIC) will take if there is lost communication between PIC and Air Traffic Control, as well as lost communication between PIC and the Visual Observer (VO)
- An emergency procedures document that explains the protocols that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the operator's manual, possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

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standard communications and any special mitigation procedures

- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- · An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the application.

When the agency has made a determination that they would like to develop a UAS program could they please forward the preliminary information I have identified above (Bold.. The most important piece is the separate public declaration letter that will need to be coordinated through the State Attorney General's Office (please review the attached email material on public declarations).

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)

Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AJV-115

(b) (6)

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From: (b) (6)
Sent: Friday, June 13, 2014 12:34 PM

To: Morton, David (FAA)
Cc: (b) (6)

Subject: FW: sUAS

(b) (6) State Police...

Best,

(b) (6)

Program Support Specialist



From: (b) (6)

Sent: Thursday, June 05, 2014 11:03 AM

To: (b) (6)
Subject: sUAS

From:

Date: June 3, 2014, 6:36:28 PM EDT

To: (b) (6)
Cc: (b) (6)

Subject: sUAS

Hello, My name is (b) (6), ATCS at (b) and an Aviation Safety Counselor with the Farmingdale FSDO in NY.

A friend of mine is working with the (b) (6)

State Police, (b) (7)(E)

here is the section of the article in question:

Fact Sheet – Unmanned Aircraft Systems (UAS)

For Immediate Release

January 6, 2014

Contact: Les Dorr or Alison Duquette

Phone: (202) 267-3883 Small Unmanned Aircraft

Small unmanned aircraft (sUAS) are likely to grow most quickly in civil and commercial operations because of their versatility and relatively low initial cost and operating expenses. The FAA is working on a proposed rule governing the use of a wide range of small civil unmanned aircraft systems.

The 2012 reauthorization bill also directed the FAA to "allow a government public safety agency to operate unmanned aircraft weighing 4.4 pounds or less" under certain restrictions. The bill specified these UAS must be flown within the line of sight of the operator, less than 400 feet above the ground, during daylight conditions, inside Class G (uncontrolled) airspace and more than five miles from any airport or other location with aviation activities. The DJI Phanton weighs 2.9 lbs.

Prior to the congressional action, the FAA and the Justice Department had been working on an agreement to streamline the COA process for law enforcement – an

agreement that also meets the mandate. Initially, law enforcement organizations will receive a COA for training and performance evaluation. When the organization has shown proficiency in flying its UAS, it will receive an operational COA. The agreement expands the allowable UAS weight up to 25 pounds.

If you can provide any insight to the use and restrictions of this QuadCopter in public safety use, It would be greatly appreciated. In particular, if you could spell out the section "under certain restrictions "that would be very helpful.

Since the State Police have suspended it's use until clarification is received, a quick response would be also very much appreciated!

Thank You,
Wayne Johnson
631-839-1516 / (b) (6)

^{*} My FAA email is wayne.d.johnson@faa.gov, however I'm away from the tower and have a difficult time accessing gov't email on the road. Please use my personnel email which I can access from my phone.

From: (b) (6)
To: (b) (6)

Cc: Morton, David (FAA); (b) (6)

Subject: FW: (b) (6) (c) Office

Date: Wednesday, July 02, 2014 1:26:00 PM

Attachments: COA Process Initial Itr Template.doc

N8900 227.pdf

(b) (6)

My name is (b) (6)

. I am a contractor with (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section,
AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First
Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies
that need to be certificated by the FAA in order to operate within the National Airspace System (NAS).
Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned
Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA
UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice, 8900.227, which I have attached with this email.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide a public declaration letter from either County or State Attorney's Office declaring your public aircraft operator status. The letter from your agencies County or State Attorney General's office is forwarded to the FAA to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41) (c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that as your agencies Accountable Executive, you CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the County or State Attorney General and their appropriate legal counsel.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With the Initial COA Application, several documents need to be submitted by the Proponent. These documents include:

- An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
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- · An emergency procedures document that explains the protocols that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the operator's manual, possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction (County Wide). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- · Review of the agency's UAS training and proficiency program, to include all training records
- · Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the application.

As mentioned above, the most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or the County District Attorney's office (please review the attached email material on public declarations).

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

b) (6)

Unmanned Aircraft Systems Tactical Operations Section, AJV-115

(b) (6)

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From: (b) (6) **Sent:** Wednesday, July 02, 2014 9:04 AM To: Morton, David (FAA); Sheriff's Office Subject: FW: Best, Program Support Specialist FAA Aviation Safety (AVS) UAS Integration Program Office (AFS-80) From: (b) (6) Sent: Wednesday, July 02, 2014 12:01 PM To: Cc: Subject: Sheriff's Office I contacted your office in regards to a law enforcement operated drone. (b) (6) Sheriffs' Office has purchased (b) (7)(E) and would like to discuss with you. Please contact me at (b) (6) when you have time to discuss

Regards,

(b) (6)



From: (b) (6)

To: (b) (6)

Cc: Morton, David (FAA)

Subject: Operating a sUAS in the NAS for Law Enforcement/First Responders

Date: Tuesday, June 10, 2014 9:44:00 AM

Attachments: N8900 227.pdf

COA Process Initial Itr Template.doc

- Great to speak with you. Here is the information I spoke of on the phone. And as a way of introduction my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice, 8900.227, which I have attached with this email.

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- The Proponent's address and contact information, including the accountable executive's name (Typically the Chief, Sheriff or Director)
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- The level of aviation experience the Proponent has (e.g. What is the level of Aviation experience the Proponent has and does the Proponent's organization plan on utilizing employees who hold private or advanced FAA pilot certificate? or an FAA Airman Medical Certificate?, etc.)
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Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the County or State Attorney General and their appropriate legal counsel.

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I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AJV-115

(b) (6)

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(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)



From: Morton, David (FAA)
To: (6)

Cc: Martin, Howard (FAA); (b) (6

Subject: RE: Delayed Reply

Date: Tuesday, July 01, 2014 2:44:32 PM

Attachments: UAS unauthorized operations law enforcement guidance FINAL.docx

Importance: High

I apologize for the delayed reply sir.

As a way of introduction my name is David Morton. I am an Aviation Safety Inspector within the Federal Aviation Administration's Unmanned Aircraft Systems (UAS) Integration Office here in Washington.

Your concerns are echoed throughout our nation at this moment. There have been, and continue to be numerous and expanding "unauthorized" Unmanned Aircraft System operations everywhere. Even here within the National capital Region. One only need reference the internet and social media sites to recognize the dangerous proliferation of this activity. Recently, a local department was alerted to such a danger when it was reported that a small UAS was flying over FEDEX field. This was the second such occurrence. Another situation occurred recently when a fire department detected a small UAS hovering very near and above the firefighters that were responding to a major structure fire and there was concern that they could be injured by this aircraft. There seems to be a perception within our society that these "Model Aircraft' can be flown anywhere at any time. We at the FAA take these incidents very seriously, as should local Fire and Law Enforcement agencies. We are particularly concerned with the terrorist aspects that present themselves with this technology.

To date, there are no specific federal regulations governing the operation of UAS in the US. However, there are numerous legacy regulations that apply to ALL Aircraft operations in the National Airspace System (NAS). More importantly, nearly every state, city, county already have legislation on the books regarding the reckless endangerment of the public. Violations of these statutes constitutes a criminal act and are completely enforceable by state, county, and city law enforcement agencies.

While the FAA continues to develop appropriate regulations to assure a safe and effective integration of UAS into the NAS, there is evidence of a considerable increase in the use of small, inexpensive UAS as mentioned above. Mostly, these unauthorized small UAS operations are undertaken by individuals with little understanding of the structure of the airspace system and the risks that the operation of these aircraft present to the NAS. We have had several discussions with the FAA's legal office concerning education of the public and civil enforcement of such activities that are considered careless and reckless endangerment of the public.

I have attached a draft letter that addresses the concerns that the FAA sees within the NAS, the FAA's role in enforcement and some guidelines in supporting the investigation of these types of events by the FAA.

I would welcome the opportunity to speak with you directly on the phone about these issues and try to answer your questions and offer some help to your agency concerning advance planning on how to address these situations. Clearly, and in the meantime, some kind of public outreach or public service announcement broadcast on local or statewide television and radio concerning the dangers these activities present may be a prudent first step. We all need to reach out to our communities and help them understand that these kinds of activities could seriously jeopardize the public safety and the missions of our public safety first responders.

If possible, I could call you this afternoon and perhaps I could arrange for my legal representative to participate on this telecon

Please let me know if you are available today or tomorrow. Thanks.

Regards, Inspector David B. Morton UAS Integration Office (AFS-87) 470 L'Enfant Plaza SW, Suite 3200 Washington, DC 20024 O: (202) 267-8263

----Original Message-----

From: (b) (6)

Sent: Tuesday, July 01, 2014 12:17 PM

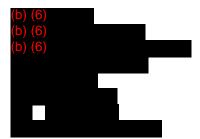
To: Morton, David (FAA) Subject: RE: Delayed Reply

Mr. Morton,

Thank you for getting back to me. I can only imagine how busy your schedule is and I appreciate you taking the time to reply to me requests. The reason I am reaching out to you is that currently I am tasked with examining the use of UAV's from the counterterrorism perspective. We are concerned with the easy availability of these devises and the wide range of uses for them.

What I need from you is the concrete set of rules and regulations that the FAA has produced that govern the use of UAVs. This would help us in gaining a better understanding of the what is legally enforceable and what is not. I would be more than happy to speak to you on this matter over the phone. I look forward to your reply.

Thank you,



If you suspect terrorism call the NYC Counterterrorism Hotline at 1-888- NYC-SAFE Confidentiality Notice: This e-mail communication and any attachments contain confidential and privileged information intended solely for the use of the designated recipients named above. If you are not an intended recipient of this communication, or if you have received this communication in error, any review, disclosure, dissemination, distribution or copying of this communication, its contents as well as any attachments, is prohibited and may subject you to prosecution. If you have received this communication in error, please notify the sender immediately by replying to this message and deleting it from your computer.

P please do not print this e-mail unless necessary

----Original Message-----

From: David.Morton@faa.gov [mailto:David.Morton@faa.gov]

Sent: Sunday, June 29, 2014 11:09 AM

To: (b) (6)
Subject: Delayed Reply

Good morning sir. I am sorry fort the tardy reply. I have been on leave since Wednesday and today I am traveling to Montreal for an international UAS/RPAS conference.

I recently visited (b) leadership to discuss the deployment of small UAS throughout (b) (6)
The fire department is strongly committed to this technology. (b) (7)(E)

While I am in Montreal, you may reach me via email at "david morton@faa.gov" or on the cell at (b) (6)

Looking forward to speaking with you and addressing your questions/concerns. Again, please forgive my tardy reply.

Dave

From: (b) (6)
To: (b) (6)
Cc: Morton, David (FAA)

Cc: Morton, David (FAA)

Subject: RE: Info on COA

Date: Tuesday, June 24, 20

Date: Tuesday, June 24, 2014 5:32:00 PM
Attachments: COA Process Initial Itr Template.doc

image001.png



Great to speak with you. As I mentioned on the phone my name is (b) (6). I am a contractor with working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice, 8900.227, which I understand you have a copy of.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide some preliminary information that gives us an idea of the type of UAS program you are considering developing and the requirement for a public declaration letter from either the City, County or State Attorney's Office declaring your public aircraft operator status.

The letter from your agencies City, County or State Attorney General's office is forwarded to the FAA to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. I have attached a word document that speaks to this declaration letter.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g.

SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With the Initial COA Application, several documents need to be submitted by the Proponent. These documents include:

- An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
- A lost communication procedures document that addresses what actions the Pilot-in-Command (PIC) will take if there is lost communication between PIC and Air Traffic Control, as well as lost communication between PIC and the Visual Observer (VO)
- An emergency procedures document that explains the protocols that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the operator's manual, possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

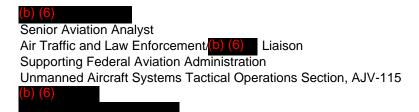
- Review of the agency's UAS training and proficiency program, to include all training records
- Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the application.

When your agency has made a determination that they would like to develop a UAS program please coordinated through the State Attorney General's Office, County District Attorney's office or City Attorney for the processing of the declaration letter. No further action on giving your agency access to the COA on line program can be accomplished until the FAA has reviewed the declaration letter to ensure it meets the needs.

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,



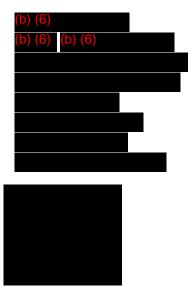
WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: (b) (6)

Sent: Tuesday, June 24, 2014 2:11 PM

To: (b) (6)

Subject: Info on COA



From: (b) (6 To: (b) (6

Cc: Morton, David (FAA)

Subject: RE: Request for Access Login ID (COA Application)

Date: Wednesday, June 11, 2014 2:48:00 PM

Attachments: N8900 227.pdf

COA Process Initial Itr Template.doc

image001.png

(b) (6)

By way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice, 8900.227, which I have attached with this email.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide some preliminary information that gives us an idea of the type of UAS program you are considering developing and a separate declaration letter from either the County or State Attorney's Office declaring your public aircraft operator status. The initial information includes but is not limited to:

- The Proponent's address and contact information, including the accountable executive's name (Typically the Chief, Sheriff or Director)
- · The name and manufacturer of the UAS technology the proponent is considering utilizing
- How the Proponent anticipates utilizing the UAS technology (Concept of Operations)
- The level of aviation experience the Proponent has (e.g. What is the level of Aviation experience the Proponent has and does the Proponent's organization plan on utilizing employees who hold private or advanced FAA pilot certificate? or an FAA Airman Medical Certificate?, etc.)
- Will the Proponent be developing the UAS program "in house" or utilizing a third party to develop and/or implement its UAS program?

The letter from the agencies County or State Attorney General's office is forwarded to the FAA to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State

under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the County or State Attorney General and their appropriate legal counsel.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With the Initial COA Application, several documents need to be submitted by the Proponent. These documents include:

- · An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
- A lost communication procedures document that addresses what actions the Pilot-in-Command (PIC) will take if there is lost communication between PIC and Air Traffic Control, as well as lost communication between PIC and the Visual Observer (VO)
- An emergency procedures document that explains the protocols that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the operator's manual, possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- Review of the agency's UAS training and proficiency program, to include all training records
- Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the application.

When your agency has made a determination that they would like to develop a UAS program could you please forward the preliminary information I have identified above (Bold). The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or your County District Attorney's office (please review the attached email material on public declarations).

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, June 11, 2014 7:41 AM

To: (b) (6) Cc: (b) (6)

Subject: RE: Request for Access Login ID (COA Application)

Importance: High

Hi (b)

Thank you for contacting the FAA. Your email has been forwarded to (b) (6) (cc'ed), our POC for Law Enforcement, who will assist you with the COA process.

Thank you.

Dina-

From: (b) (6)

Sent: Wednesday, June 11, 2014 9:30 AM

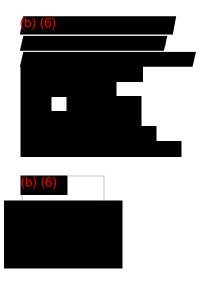
To: Reyes-Garcia, Dina (FAA)

Subject: Request for Access Login ID (COA Application)

This is (b) (6) of the (b) (6) County Sheriff's Office located in (b) (6) I am writing to request an access login ID for the FAA website in order to apply for a COA.

Thank you for your time.

Regards,



From: (b) (6)

To: (b) (6)

Co: Morton David (EAA)

Cc: Morton, David (FAA)
Subject: RE: Request for COA

Date: Monday, June 09, 2014 3:05:00 PM

Attachments: N8900 227.pdf

COA Process Initial Itr Template.doc



My name is (b) (6)

. I am a contractor with (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section,
AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First
Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies
that need to be certificated by the FAA in order to operate within the National Airspace System (NAS).
Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned
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- Will the Proponent be developing the UAS program "in house" or utilizing a third party to develop and/or implement its UAS program?

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I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement/SAC-EC Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA) Sent: Monday, June 09, 2014 8:59 AM

To: (b) (6) Cc: (b) (6)

Subject: RE: Request for COA

Importance: High

Hi (b) (6)

Thank you for contacting the FAA. Your email has been forwarded to (b) (6) (cc'ed), our POC for Law Enforcement, who will assist you with your questions and the COA process.

Thank you. Dina-

From:

Sent: Friday, June 06, 2014 4:48 PM To: Reyes-Garcia, Dina (FAA) Subject: Request for COA

I am requesting a COA for the (b) (6) Police Department in (b) (6) California.

Concept of Operation:



Thanks (b)



From: (b) (6)
To: (b) (6)

Cc: Morton, David (FAA)

Subject: RE: UAV questions

Date: Friday, June 13, 2014 9:25:00 AM

Attachments: N8900 227.pdf

COA Process Initial ltr Template.doc

(b) (b)

(b) (6)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice, 8900.227, which I have attached with this email.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide some preliminary information that gives us an idea of the type of UAS program you are considering developing and a separate public declaration letter from either the County or State Attorney's Office declaring your public aircraft operator status. The initial information includes but is not limited to:

- The Proponent's address and contact information, including the accountable executive's name (Typically the Chief, Sheriff or Director)
- The name and manufacturer of the UAS technology the proponent is considering utilizing
- How the Proponent anticipates utilizing the UAS technology (Concept of Operations)
- The level of aviation experience the Proponent has (e.g. What is the level of Aviation experience the Proponent has and does the Proponent's organization plan on utilizing employees who hold private or advanced FAA pilot certificate? or an FAA Airman Medical Certificate?, etc.)
- Will the Proponent be developing the UAS program "in house" or utilizing a third party to develop and/or implement its UAS program?

The letter from the agencies County or State Attorney General's office is forwarded to the FAA to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the County or State Attorney General and their appropriate legal counsel.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With the Initial COA Application, several documents need to be submitted by the Proponent. These documents include:

- An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
- A lost communication procedures document that addresses what actions the Pilot-in-Command (PIC) will take if there is lost communication between PIC and Air Traffic Control, as well as lost communication between PIC and the Visual Observer (VO)
- An emergency procedures document that explains the protocols that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the operator's manual, possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- Review of the agency's UAS training and proficiency program, to include all training records
- Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the

Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the application.

When your agency has made a determination that they would like to develop a UAS program could you please forward the preliminary information I have identified above in Bold. The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or County Attorney's office (please review the attached email material on public declarations).

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AJV-115

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(b) (6)

Sent: Friday, June 13, 2014 5:34 AM To: Morton, David (FAA); (6) (6)

Subject: FW: UAV questions

Hi gentlemen,

Law enforcement inquiry for you. Let me know if you reply directly or if you want to send me prepared text.

Thank you!

Best,

(b) (6)

Program Support Specialist
FAA Aviation Safety (AVS)
UAS Integration Program Office (AFS-80)

(b) (6)

Sent: Thursday, June 12, 2014 3:19 PM

(b) (6)

Subject: FW: UAV questions

(b) (6)

(b) — I forwarded you (b) (6) — s email on May 29. I know, it's just less than two weeks ago, but he is keep calling me.

Could you or (b) reply to him please? ©

Thank you.

Regards,

(b) (6)

From: (b) (6)

Sent: Thursday, June 12, 2014 2:26 PM

To: (b) (6)

Subject: UAV questions

Hi (b) -

I spoke with you today on the phone regarding a few questions I had for UAV's. You requested that I email you my inquiries.

I work for the (b) (6) County Sheriff's Office in (b) (6) I am a Deputy Sheriff and am on our S.W.A.T. Team. Our team is interested in obtaining a UAV for use during SWAT related functions. I have read several pages on the FAA website, but am still not 100 percent clear on what we need from the FAA to have a UAV program. (b) (7)(E)

I have read that we need a COA from the FAA. I also looked through the packet that needs to be filled out to apply for the COA. There are several questions on the COA application that do not necessarily apply to our agency. (b) (7)(E)

My biggest question is if we need a COA if we are only using the UAV during an exigent circumstance rather than on a preplanned event.

I have attached a link to a UAV that we might be interested in obtaining. We would use something like this.

(b) (7)(E)

Any input or assistance regarding this matter is very much appreciated.

(b) (6)

From: Morton, David (FAA)

To: (b) (6)

Cc: Martin, Howard (FAA); (b) (6)
Subject: RE: Your Enforcement Inquiry.
Date: Tuesday, July 01, 2014 3:03:11 PM

Attachments: image001.gif
Importance: High

Good afternoon (b) (6)

As a way of introduction my name is David Morton. I am an Aviation Safety Inspector within the Federal Aviation Administration's Unmanned Aircraft Systems (UAS) Integration Office here in Washington.

Your concerns about unauthorized or illegal small UAS operations are echoed throughout our nation at this moment. There have been, and continue to be numerous and expanding "unauthorized" Unmanned Aircraft System operations everywhere. Even here within the National Capital Region. One only need reference the internet and social media sites to recognize the dangerous proliferation of this activity. (b) (7)(E)

I am certain that every law enforcement agency

is becoming increasingly concerned about potential interdiction of police activities or even counter surveillance to respond to police tactics. All of these nefarious activities present a huge challenge for us and for you.

There seems to be a perception within our society that these "Model Aircraft" can be flown anywhere at any time. We at the FAA take these incidents very seriously, as should local Fire and Law Enforcement agencies. We are particularly concerned with the terrorist aspects that present themselves with this technology.

To date, there are no specific federal regulations governing the operation of UAS in the US. However, there are numerous legacy regulations that apply to ALL Aircraft operations in the National Airspace System (NAS). More importantly, nearly every state, city, county already have legislation on the books regarding the reckless endangerment of the public. Violations of these statutes constitutes a criminal act and are completely enforceable by state, county, and city law enforcement agencies.

While the FAA continues to develop appropriate regulations to assure a safe and effective integration of UAS into the NAS, there is evidence of a considerable increase in the use of small, inexpensive UAS as mentioned above. Mostly, these unauthorized small UAS operations are undertaken by individuals with little understanding of the structure of the airspace system and the risks that the operation of these aircraft present to the NAS. We have had several discussions with the FAA's legal office concerning education of the public and civil enforcement of such activities that are considered careless and reckless endangerment of the public.

I have attached a draft letter that addresses the concerns that the FAA sees within the NAS, the FAA's role in enforcement and some guidelines in supporting the investigation of these types of events by the FAA.

I would welcome the opportunity to speak with you about these issues and try to answer your questions and offer some help to your agency concerning advance planning on how to address these situations. Clearly, and in the meantime, some kind of public outreach or public service announcement broadcast on local or statewide television and radio concerning the dangers these activities present may be a prudent first step. We all need to reach out to our communities and help them understand that these kinds of activities could seriously jeopardize the public safety and impact the missions of our public safety first responders.

Perhaps I could arrange for my legal representative to participate on a telecom with you. Please let me know if you are available to take such a phone call. Working together, perhaps we can get a handle on this and arrest the oncoming tide wave of illegal or unauthorized small UAS flight operations. Thanks.

Regards,

David B. Morton

UAS Integration Office (AFS-87) 470 L'Enfant Plaza SW, Suite 3200 Washington, DC 20024

O: (202) 267-8263

(b) (6)

(b) (6)

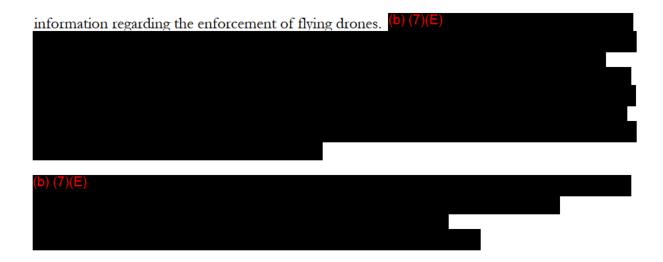
Sent: Tuesday, July 01, 2014 12:59 PM

(p) (g)

Subject: Question for Mr. Williams

(b) (6)

Thank you for passing this on to Mr. Williams for me.



Thank you.



From: (b) (6) To: (b) (6)

Cc: Morton, David (FAA)

Subject: FW: COA

Date: Friday, July 18, 2014 12:09:00 PM
Attachments: COA Process Initial Itr Template.doc

N8900 227.pdf

Importance: High

(b) (6)

My name is (b) (6)

. I am a contractor with (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section,

AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First

Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies
that need to be certificated by the FAA in order to operate within the National Airspace System (NAS).

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 event of an emergency (this could include execution of procedures outlined in the operator's manual,
 possible alternative courses of action available for each phase of flight, and any outside agencies or
 resources for medical and fire or other assistance)

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When your agency has made a determination that they would like to develop a UAS program could you please coordinate the required public declaration letter that will need to be coordinated through your State Attorney General's Office or County Attorney's office (please review the attached email material on public declarations).

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, July 16, 2014 1:37 PM

(b) (6)

Subject: RE: COA Importance: High



Thank you for contacting the FAA. Your email has been forwarded to our POC for Law Enforcement, (b) (6) (cc'ed), who will continue to assist you.

Best-Dina.

From: (b) (6)

Sent: Wednesday, July 16, 2014 11:02 AM

To: Reyes-Garcia, Dina (FAA)

Subject: COA

Ms. Reves-Garcia,

Just recently our department (b) (7)(E)

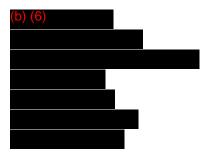
The primary use of these units will focus on the following activities: video documentation of crime scenes, search and rescue, neighborhood searches for fleeing felons, execution of high risk warrants, and Tactical situations. In contacting the FAA I learned we may need a Certificate of Authorization from the FAA to use these devices.

Therefore please provide me with the necessary information so that I can begin the process. I am providing some of the specifications of the units for your review. Thank you for your help.

(b) (7)(E)



Once again thank you for your assistance.



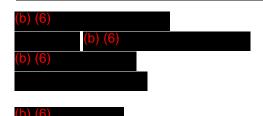
From: (b) (6)
To: (b) (6)

Cc: Morton, David (FAA)
Subject: FW: Login for application

Date: Wednesday, July 23, 2014 11:53:00 AM
Attachments: COA Process Initial Itr Template.doc

N8900 227.pdf

Importance: High



My name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section,
AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First
Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies
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The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, the County Attorney's office or City Attorney (please review the attached email material on public declarations). We cannot move forward with access to the COA On-line application program until we have the public declaration letter.

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to

contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, July 23, 2014 8:16 AM

Cc: (b) (6)

Subject: RE: Login for application

Importance: High

(b) (6)

Thank you for contacting the FAA. Your request has been assigned to (b) (6) (cc'ed), our POC for Law Enforcement, who will continue to assist you with your request.

Best-

Dina.

From: (b) (6)

Sent: Wednesday, July 23, 2014 11:04 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** FW: Login for application

From: (b) (6)

Sent: Wednesday, July 23, 2014 9:52 AM

To: (b) (6)

Subject: Login for application

To whom it may concern,

I am in search of the proper protocol and procedures to apply for authorization to operate a UAV/UAS system to use for government purposes. Specifically, surveillance, investigation, search and rescue, and emergency egress management and any other legal use of such device.

Your help would be greatly appreciated in this matter and please contact me if you have further questions or concerns.

Thank you in advance.



From: (b) (6 To: (b) (6

Cc: Morton, David (FAA)

Subject: FW: UAS COA application

Date: Wednesday, August 13, 2014 6:54:00 PM

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

Order 6900 i volume id

Importance: High

(b) (6)

Attachments:

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agencies County or State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the County or State Attorney General and their appropriate legal counsel.

0==D =\4

STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they

will submit their initial application (Phase I). The initial COA is generally restricted to **training and evaluation** activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- 3. A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Fire management missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates all of the agency's jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- · A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- · A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- \cdot An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or County Attorney's office (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (b)

Senior Aviation Analyst

Air Traffic and Law Enforcement, Fire and First Responders (b) (6) Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AJV-115/AFS-85

(b) (6)

From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, August 13, 2014 12:25 PM

To: (b) (6)

Cc: (b) (6)
Subject: RE: UAS COA application

Importance: High



Your case has been assigned to (b) (6) Law Enforcement liaison, who will continue to assist you with your questions and the COA process.

Best-

Dina.

From: (b) (6)

Sent: Tuesday, August 12, 2014 11:23 AM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6)

Subject: RE: UAS COA application

Dina,

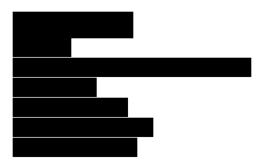
Thank you for getting back to me. The agency requesting the COA is (6)

(b) (7)(E)



Thank you,





From: Dina.Reves-Garcia@faa.gov [mailto:Dina.Reves-Garcia@faa.gov]

Sent: Tuesday, August 12, 2014 9:28 AM

To: (b) (6)

Subject: FW: UAS COA application

Importance: High

(b) (6)

Thank you for contacting the FAA. Please provide additional information. Which public agency is requesting the COA, a small description of the UAS, and the concept of operation (a small paragraph will suffice).

Thank you.

From: (b) (6)

Sent: Wednesday, August 06, 2014 3:39 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** FW: UAS COA application

From: (b) (6)

Sent: Wednesday, August 06, 2014 1:19 PM

To: (b) (6)

Subject: UAS COA application

I am trying to access the UAS COA Online System by following the <u>link</u> on your website. The link requires me to obtain an account and enter my login and password. Would you please tell me where I can obtain the OE/AAA account?

Thanks,



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If you are not the intended recipient of this email, any use, dissemination, forwarding, printing, or copying of this email is prohibited. Please notify the sender of this email of the error and delete the email.

From: (b) (6)
To: (b) (6)

Cc: Morton, David (FAA)
Subject: FW: UAV COA

Date: Friday, July 18, 2014 12:12:00 PM

Importance: High

(b) (6)

My name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section,
AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First
Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies
that need to be certificated by the FAA in order to operate within the National Airspace System (NAS).
Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned
Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA
UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice, 8900.227, which I have attached with this email.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide the FAA with a declaration letter from the agencies County or State Attorney General's office is forwarded to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the County or State Attorney General and their appropriate legal counsel.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With the Initial COA Application, several documents need to be submitted by the Proponent. These documents include:

- An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
- A lost communication procedures document that addresses what actions the Pilot-in-Command (PIC) will take if there is lost communication between PIC and Air Traffic Control, as well as lost communication between PIC and the Visual Observer (VO)
- An emergency procedures document that explains the protocols that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the operator's manual, possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- · Review of the agency's UAS training and proficiency program, to include all training records
- · Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the application.

When your agency has made a determination that they would like to develop a UAS program could you please coordinate the required public declaration letter that will need to be coordinated through your State Attorney General's Office or County Attorney's office (please review the attached email material on public declarations).

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Liaison
Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, July 16, 2014 2:01 PM

To: (b) (6)

Subject: RE: UAV COA Importance: High

(b) (6)

Thank you for contacting the FAA. Your email has been forwarded to our POC for Law Enforcement, (b) (6) (cc'ed), who will continue to assist you with your request.

Best-Dina.

From: (b) (6)
Sent: Wednesday, July 16, 2014 1:33 PM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6)

Subject: UAV COA

Hello,

My name is (b) (6) , I work for the (b) (6) office in the (b) (6) , and I have been tasked to set up a COA in my jurisdiction. I am requesting an account to start the process. The concept of operation would be for public safety, and search and rescue operations in mountainous terrain.

Respectfully,



From: (b) (6)
To: (b) (6)
Cc: Morton, David (FAA)

Subject: Operating an Unmanned Aircraft in the National Airspace System

Date: Thursday, July 10, 2014 4:52:00 PM

Attachments: N8900 227.pdf

COA Process Initial Itr Template.doc

(b) (6)

Great to speak with you. As an introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned
Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing
Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation
Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA's Unmanned Aircraft Systems Operational Approval Notice, 8900.227, which I have attached with this email.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide a public declaration letter from either the City, County or State Attorney's Office declaring your public aircraft operator status. The letter from the agencies City, County or State Attorney General's office is forwarded to the FAA to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel. I have attached a Word Document that speaks to the Public Declaration letter.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With

the Initial COA Application, several documents need to be submitted by the Proponent. These documents include:

- An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
- A lost communication procedures document that addresses what actions the Pilot-in-Command (PIC) will take if there is lost communication between PIC and Air Traffic Control, as well as lost communication between PIC and the Visual Observer (VO)
- An emergency procedures document that explains the protocols that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the operator's manual, possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- · Review of the agency's UAS training and proficiency program, to include all training records
- Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (http://www.faa.gov/about/initiatives/uas/) that speaks to the COA process and an example of the application.

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Unmanned Aircraft Systems Tactical Operations Section, AJV-115

(b) (6)

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(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6)
To: (b) (6)

Cc: (b) (6) Reyes-Garcia, Dina (FAA); Morton, David (FAA)

Subject: RE: Fw: Update: RE: Need to change (5) (6)

Date: Tuesday, July 15, 2014 5:30:00 PM

(b) (6)

As a way of introduction my name is (b) (6) working for the Federal Aviation Administration Unmanned Aircraft
Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA UAS requests.

I believe that a new COA on line access will be required since the COA on Line program manages the different proponents based on their domain so the (b) (6) would clearly not be within the Law enforcement domain and as such would need a new access. I also need to understand the relationship between the University and the law enforcement agency (LEA) that will eventually be utilizing the UAS. If the proponent is the LEA then we will need a new public declaration letter from the State attorney general's office that declares the (b) Police as a public agency under Tile 49 USA 40102A(41)(c) and that they will not operate the UA for commercial purposes under Title 49 USC 40125b. This declaration is no different than the one you had to acquire for the university.

Another difference between the University COA and a Law Enforcement, fire, first responder COA is that the proponent will at some point want to respond to an event in a timely manner that is not within the confines of what typically a University COA operational site is approved for. Since this area is typically the jurisdiction that the proponent could potentially operate within (City, county or multiple counties as you noted in your example by including (b) (6) or other PDs) the program requires an initial training COA (Phase 1) with a follow-on Jurisdictional COA (Phase 2) described below.

So The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With the Initial COA Application, several documents need to be submitted by the Proponent as part of the COA on-line application. These documents include:

- An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
- A lost communication procedures document that addresses what actions the Pilot-in-Command (PIC) will take if there is lost communication between PIC and Air Traffic Control, as well as lost communication between PIC and the Visual Observer (VO)
- An emergency procedures document that explains the protocols that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the operator's manual, possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- Review of the agency's UAS training and proficiency program, to include all training records
- Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

Please let me know if you have any questions. Both Mr. Morton and I are available for assistance.

Respectfully,

Senior Aviation Analyst Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AJV-115 b) (6)

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From: Reyes-Garcia, Dina (FAA)

To: 🚺 Cc:

Grimsley, James L.; (b) (6)

Subject: RE: Fw: Update: RE: Need to change (b)

Importance: High

Robert,

Sent: Tuesday, July 15, 2014 8:50 AM

Its most likely that a new account for Law Enforcement will need to be created. I have forwarded your email to our POC for Law Enforcement, (b) (6) (cc'ed) for his input.

D.

From: (b) (6)
Sent: Friday, July 11, 2014 2:41 PM
To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6)

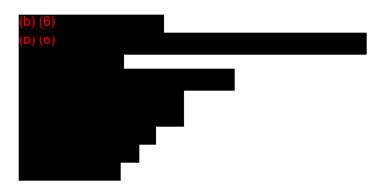
Subject: RE: Fw: Update: RE: Need to change (b) (6)

Hi Dina,

We are going to be working with the Police Department here (b) (6) to obtain a Training COA and eventually an operational COA for their use. The (b) (6) is a State Police Agency. Additionally, with a cooperative agreement, the (b) (6) a City PD, will probably request mutual assistance from (b) PD when necessary.

The question I have, will we need a separate login/account for PD for a Training COA, or can we use our existing account to request the COA?

Thanks,



This e-mail (including any attachments) is covered by the Electronic Communications Privacy Act, 18 USC. 2510-2521. It is confidential and may be legally privileged. If you are not the intended recipient, you are hereby notified that any retention, dissemination, distribution, or copying of this communication is strictly prohibited. Please reply to the sender that you have received the message in error, and then delete it. Thank you.

From: Dina.Reves-Garcia@faa.gov [mailto:Dina.Reves-Garcia@faa.gov]

Sent: Wednesday, June 04, 2014 7:36 PM

To: (b) (6) Cc: (b) (6) Subject: RE: Fw: Update: RE: Need to change (b) (6)

Importance: High

(b) (6)

Please ensure the following:

- 1. All Draft COAs should have a location assigned to them. You can find the location for each COA under Operational Description > Location. Both the state and county fields should be filled. If the location fields are blank only the creator of the COA can view it. (Please note that these fields are auto-populated by the system when you input your location information under the Flight Operations Area/Plan section.)
- 2. Please keep in mind that both yourself and (b) (6) have been assigned the following counties/state:



If you have created a COA outside of your requested AOR's you will not be able to see the Draft COA.

Dina-

From: (b) (6)
Sent: Tuesday, June 03, 2014 2:55 PM
To: Reyes-Garcia, Dina (FAA)
Co: (b) (6)
Subject: RE: Fw: Update: RE: Need to change (b) (6)
Importance: High

Hi Dina,
(b) (6)
(copied here) and I need to have visibility on our COA applications from the (b) (6)

. We are unable to see each other's draft applications. Is there any way to change the privileges on our accounts so that we can both see draft COA applications from (b) ?

My mobile number is (b) (6)

I f you need to reach me.

Thanks,
(b) (6)

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From: <u>Dina.Reyes-Garcia@faa.gov</u> [<u>mailto:Dina.Reyes-Garcia@faa.gov</u>]

Sent: Monday, November 04, 2013 3:36 PM

To: (b) (6) Cc: (b) (6)

Subject: Re: Fw: Update: RE: Need to change (b) (6)

Importance: High

(b) (6)

Your account has been reactivated. You should receive an email with instructions on resetting your password. Are we deactivating (b) (6) account?

Dina Reyes-Garcia Management and Program Analyst Unmanned Aircraft Systems Integration Office Federal Aviation Administration Washington, DC

From: (b) (6

To: Dina Reyes-Garcia/AWA/FAA@FAA

Date: 10/28/2013 08:03 AM

Subject: Fw: Update: RE: Need to change (b) (6)

Good morning Dina,

Are we able to complete this action?

(b) (6)

Air Traffic Control Subject Matter Expert
University/College Liaison
Unmanned Aircraft Systems Integration Office, AJV-115
FAA Headquarters
490 L'Enfant Plaza SW, Ste 3200
Washington, DC 20024
(202) 385-4582

(b) (6)

The greater danger for most of us is not that our aim is too high and we miss it, but that our aim is too low and we reach it...

(b) (6)

To: (b) (6)

Date: 10/26/2013 05:49PM

cc: Dina Reyes-Garcia/AWA/FAA@FAA

Subject: Update: RE: Need to change (b) (6)
(b) (6)

Hope all is well. I'm just following-up to check on the COA account changeover per the email chain below. Let me know if you need any additional information from me. I will be in Washington early next week, but back in the office on Thursday this week.

I need to restore my status as the COA Account Manager for the (b) (6)

Best regards,



(b) (6)

From: (b) (6)
Sent: Thursday, October 17, 2013 5:45 AM

To: (b) (6)

Cc: <u>Dina.Reyes-Garcia@faa.gov;</u> (b) (6) Subject: RE: Need to change (b) (6)

(b) (6)

Good morning. As you are aware, the shut down of our government meant that I was not in the office and was unable to respond to your email.

Also, right before the shutdown, my contract was moved and I was reassigned. Your new point of contact for COA processing is (b) (6) (6) (COA processing is (b) (COA p

Thank you,



From: **(b) (6**

AJV-13, UAS Group

To: Dina Reyes-Garcia/AWA/FAA@FAA,

Cc: (b) (6)

Date: 10/09/2013 05:49 PM

Subject: RE: Need to change OU COA manager/POC

Greetings,

I am now back at the (b) (6) after completing my leave of absence and the COA responsibility at the university has now been assigned back to me. If possible, I need to be restored as the COA manager for (b).

Let me know if you need additional information. (b) (6) if you need to reach me.

Best regards,

(b) (6)

From: <u>Dina.Reyes-Garcia@faa.gov</u> [<u>mailto:Dina.Reyes-Garcia@faa.gov</u>]

Sent: Tuesday, April 02, 2013 4:31 PM

To: (b) (6)

Subject: RE: Need to change (b) (6)

Importance: High

Your account has been deactivated.

An account has been created for (b) (6)

Best,

Dina Reyes-Garcia Program Analyst Unmanned Aircraft Systems Integration Office Federal Aviation Administration Washington, DC

From: (b) (6)

To: Dina Reyes-Garcia/AWA/FAA@FAA

Cc: (b) (6)

Date: 04/01/2013 03:26 PM
Subject: RE: Need to change (b) (6)

Hi Dina,

We will be transferring full control and responsibility to (b) (6), so I won't need any access. Basically it will just be swapping him for me in the system.

Robert will complete the information and forward to you.

Best regards,



From: <u>Dina.Reyes-Garcia@faa.gov</u> [<u>mailto:Dina.Reyes-Garcia@faa.gov</u>]

Sent: Monday, April 01, 2013 12:50 PM

To: (b) (6)

Subject: Re: Need to change (b) (6)

Importance: High

Hi (b) (6),

- 1. Please have (b) (6) complete the form below.
- 2. Will you still need access to the system. If so, will your permissions stay the same (i.e, commit a COA, update, draft)
- 3. I believe your letter was already approved by legal. We can use that same letter for (b) (6) can you confirm that this is ok.

Submit the information below for access consideration.

(All fields are required.)

Name:

E-mail:

Telephone:

Permissions: (provide as applicable)

- COA Access (read-only access)
- Add COA Case (allows user to draft a COA)
- Update COA Cases (allows user to make changes to a COA)
- Commit UAS COA Case (allows user to commit (submit) a COA)

Note: Each permission contains the properties of the permission above it.

AOR (Area of Responsibility): (County, State)

Reason: (Provide us with a reason why you are using a UAS.)

Example #1:

I will be submitting COA applications for the (Name of University) which is developing a UAS program to address law enforcement and emergency response applications.

Example #2:

I am a UAS operator and the UAS Tier 1 Projects Officer for Marine Corps Systems Command and will be conducting flight demonstrations for VIP visitors. (SES and Flag officers). I will need to establish an account in order to create COA requests.

Example #3:

I will be submitting COA applications for the (Name of University) which is developing a UAS program for the purpose of research and development. Initially research efforts will focus on agricultural applications but eventually will move into other areas of UAS technology development and applications.

Example #4:

I just started working UAS Airspace issues for the Air Force Special Operations Command. I will need to establish an account in order to create COA requests.

Standing by....

Dina Reyes-Garcia
Program Analyst
Unmanned Aircraft Systems Integration Office
Federal Aviation Administration
Washington, DC

From: (b) (6)
To: (b) (6)

Cc: Dina Reyes-Garcia/AWA/FAA@FAA, '(b) (6

Date: 03/29/2013 12:27 PM
Subject: Need to change (6) (6)

We need to change our (b) COA manager if at all possible. Currently I'm the designated COA manager/POC in the system, but we need to instead appoint (b) (6) (copied here) as (b) 's COA manager. Can you tell me how we can do that in the system? Do we need a letter?

Best regards,

(b) (6)

From: (b) (6)

Sent: Thursday, September 20, 2012 9:29 AM

To: (b) (6)

Cc: dina.reyes-garcia@faa.gov

Subject: UAS COA CASE (b) (6) - ATC Facility Coordination

This is an automated message from UAS COA Online.

Reference CASE (b) (6)

Your application has completed the ATC Facility Coordination.

Signature -

The details for this case include:



DATE-ENTERED:

06/18/12

DATE-SUBMITTED:

06/19/12

LAST MODIFIED BY:

Joe Maibach

Please login at (b) (6) and the control of the UAS COA page or the UAS COA Search page for more info on this case.



It was a pleasure to speak with you vesterday. I have taken a few moments to browse through your "Conceptual" (or Notional) draft of a proposed UAS training curriculum. Your intention to filed a training curriculum is laudable and the necessity for such training, particularly for the technology envisioned (DJI Phantom) where there exists no manufacturer training material, is certainly needed, I think you have the framework of a good program. However, there remains much to be crafted to make your program accurate, relevant and comprehensive.

I would suggest you begin with a very thorough literature review and reference various trade association articles and documents. There are many facets to this technology that you should address. Chief among them is the FAA private pilot ground school curriculum. If your intention is to produce and "equivalent" training curriculum to certify pilots of this technology, then that would be a necessity. I also recommend that you go online and carefully read title 14 CFR part 91 and the 2012 federal aviation modernization and reform act (FMRA). I would recommend you review 4th amendment issues currently confronting the industry and the FAA and become very familiar with the various avenues of certification/authorization for deployment of UAS in the NAS. 14 CFR part 1 is a great place to start as there are definitions there that will help scope your understanding.

You have begun a great project that is necessary and valuable in light of the absence of any formal training from the makers of the Phantom. However, you must be certain to capture the entire story correctly. I am attaching our introduction letter to potential Public operators of this technology along with some attachments so that you have some baseline information. Hope it helps.

(b) (6)

As a way of introduction, I am Inspector David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager. In my work, I am supported by a contractor with a contractor with working for the Tactical Operations Section (AFS-85) of the UASIO. Is the Air Traffic Office (ATO) UAS coordinator for all law enforcement (LEX), effect and Tists Responder Agencies. and Unmanned Aircraft System (sUAS) technologies that need to be certificated by the FAA in order to operate with the National Airspace System (NAS).

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/authorization (COA). Typically Law Enforcement Agency (LEA) SUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Natundards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA s "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational aditiodes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace is usues.

THE FIRST STEP

Before the FAA grants assess to an agency to COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agencies City, County or State Attorney s office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency s Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

STEP TWO

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. SWAT or SRT team coordination) for operational missions, search and rescue, disaster control, Fire, EMS, etc.). Along with the Initial COA Application, there are several documents that need to be submitted by the Proponent as attachments. These documents include

- 1. An Airworthiness Release (AWR) statement from the Proponent s accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual observer(s) (VO).
- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator s flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a ..."What will you do if something bad happens?).

STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates all of the LEA s jurisdiction (city, county, etc). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include

- A review of the agency s UAS training and proficiency program, to include all training records
 A review of the agency s UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource
 Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
 A review of the agency s Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency s jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note The SRAP must include a description of specifier insk controls the agency s will enable a genety of will enable any attendant hazard for UAS).
 An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency s program.

The FAA s UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney's office (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency s public declaration lette

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover many questions that most interested agency has starting out. Please feel free to contact Mr. Pansky or me with any questions or if we may be of any further assistance

Regards,
David B. Morton
UAS Integration Office (AFS-87)
470 L'Enfant Plaza SW, Suite 3200
Washington, DC 20024

From: Kelly Roberts [mai to:kroberts@hartselle.org] Sent: Tuesday, August 12, 2014 4:47 PM To: Morton, David (FAA) Subject: Hartselle Police Department UAS program

I'm sure you receive a multitude of emails daily and knowing politics. I sure most of those are lengthy. I would really like to enlist your assistance in checking through the attached documents and a give me an opinion feasibility of this type of class This is a rough draft and far from complete, but not knowing FAA response hinders me from getting much further in deoth with the curriculum. These documents will lay out in better terms what we would ideally like to accomplish with our training program. 1 apologize for the length but there are no short cuts when attempting to compile a program of this magnitude involving multiple organizations and the multitude of safety factors which are really just hinted on in the attached document.

I hope this email find you well as I was having issues yesterday with my local email service.

Thank you for your time and I hope I can count on some assistance with the development of this program as it could be of great benefit for public safety agencies area wide!

artselle Police Department 106 Sherill St. Hartselle, Alabama 35640

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From: To: Morton, David (FAA) Cc:

Subject: Police contact information

Date: Wednesday, August 06, 2014 9:14:00 AM Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

As a way of introduction, my name is (b) (6) . I am a contractor with (b) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle LEA UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-ofcontrol link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agencies City, County or State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, Fire, EMS, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- 3. A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
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STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates all of the LEA's jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- · A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- · A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney's office (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web

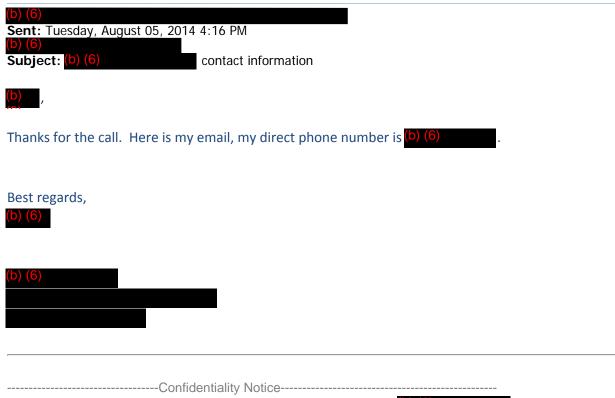
site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement, Fire and First Responders/(b) (6) Liaison Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AJV-115/AFS-85
(b) (6)

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From: (b) (6)
To: (b) (6)

Cc: Reyes-Garcia Dina (FAA): Morton David (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

 Date:
 Monday, July 28, 2014 8:42 00 AM

 Attachments:
 Order 8900 1 Volume 16.docx

 COA Process Initial Itr Template.doc

(b) (6)

My name is (6) (6) . I am a contractor wi h (5) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the Na ional Airspace System (NAS). For UAS operators, his authoriza ion is granted via he issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" opera ions. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Informa ion Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide the FAA with a declaration letter from the agencies City, County or State Attorney's office is forwarded to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With he Initial COA Applica ion, several documents need to be submitted by he Proponent. These documents include:

- · An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- · A lost-link procedures document hat addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
- · A lost communica ion procedures document that addresses what actions the Pilot-in-Command (PIC) will take if there is lost communica ion between PIC and Air Traffic Control, as well as lost communication between PIC and he Visual Observer (VO)
- An emergency procedures document that explains the protocols that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the operator's manual, possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- · Review of the agency's UAS training and proficiency program, to include all training records
- Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from no ification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique opera ional areas within that jurisdic ion and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mi igate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (www.faa.gov/uas) that speaks to the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney's office (please review the attached email material on public declarations). We cannot move forward with access to the COA On-line application program until we have the public declaration letter.

I understand hat the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6) Senior Avia ion Analyst

Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tac ical Operations Section, AJV-115



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From: Reyes-Garcia, Dina (FAA) Sent: Friday, July 25, 2014 4:27 PM

Cc: (b) (6)

Subject: FW: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Importance: High

(b) ,

Thank you for contacting the FAA. Your request has been assigned to (b) (6) , Law Enforcement liaison, who will continue to assist you with your request. You may also find more information on our website at www.faa.gov/uas.

Best, Dina.

From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJR-36-UAS

Sent: Friday, July 25, 2014 7:15 PM To: Reyes-Garcia, Dina (FAA)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

(b) (6) 07/24/2014 08:43 AM

To 9-AJV-115-UASCOA/AWA/FAA@FAA,

CC

Subject Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/about/office.org/headquarters offices/ato/service units/systemops/aaim/organizations/uas/coa/

Message:

Hello, my name is Officer (b) (6), (b), I'm a Crime Scene Investigator with the Pasadena Texas Police Department (1201 Davis St. Pathon 1201 Davis St. Pat

From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: (b) (6) A); Morton, David (FAA)

Subject: RE: Message from www.faa.gov: Questions relating to COA

Date: Wednesday, August 06, 2014 9:24:00 AM
Attachments: COA Process Initial Itr Template.doc
Order 8900 1 Volume 16.docx

(b) (6)

As a way of introduction, my name is b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

We have had several discussions with (b) (6), (b) over the past few years about the UAS program and the need for approval from the FAA to operate a UAS in the NAS but here is the basic information that we typically pass on to interested agencies. The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agencies County or State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the County or State Attorney General and their appropriate legal counsel.

STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to **training and evaluation** activities at a specific training site that is confined to Class G airspace, remaining well clear of housing

areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and
 that the it will be operated and maintained in strict compliance with the manufacturer's operational and
 maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- 3. A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Fire management missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates all of the agency's jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- · A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- · A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- · An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or County Attorney's office (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until

they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement, Fire and First Responders,

(b) (6)
Liaison Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AJV-115/AFS-85

(b) (6)

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From: (b) (6)

Sent: Tuesday, August 05, 2014 4:32 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6) Reyes-Garcia, Dina (FAA)

Subject: RE: Message from www.faa.gov: Questions relating to COA

(b) (6)

I apologize for the delay and thank you for your patience.

(b) (6) , my colleague, works with law enforcement on obtaining COAs for UAV use. He is included on this thread.

In the interim, I would encourage you to have one POC for said COA account, as it will be required for the COA online site.

Best regards,

(b) (6)

Program Analyst – UAS Integration Office (AJV/115)

(b) (b)

(b) (6), (b) (7)(C)

To cc 9-AJV-115-UASCOA/AWA/FAA@FAA,

04/08/2014 11:55 AM

Subject

Message from www.faa.gov: Questions relating to COA

website. You have been contacted via an email link on the following page: http://www.faa.gov/about/initiatives/uas_faq/

Message:
Hello,
My name is (b) (6), (b) (7)(C)
Texas. I h
process for operating a UAS. Can you pleas
the COA application process?

(b) (6), (b) (7)(C)

riff's Office, Houston, to start the C.O.A. information to start

From: (b) (6)
To: (b) (6)

Subject: RE: Need account on (b) (6)

Date: Thursday, July 31, 2014 2:48:00 PM

Attachments: image001.png image003.png

image003.png image005.png

(b) (6)

Not necessary to send a revised CONOPS but let me take a few moments to explain that since the potential to operate the UAS could require immediate deployment of the asset we do have a different type of program for rapid deployment of a UAS.

The FAA believes that the safest and most successful process when approving a jurisdictional-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial Certificate of Waiver/Authorization (COA) application (Phase I). The initial COA is generally restricted to **training and evaluation** activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, Fire, EMS, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

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A review of the agency's UAS training and proficiency program, to include all training records

- · A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- · A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- · An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

As always, if you have questions please feel free to contact me .

Respectfully,

(b) (6)

From: (b) (6)
Sent: Thursday, July 31, 2014 8:09 AM

To: (b) (6)

Subject: RE: Need account on (b) (6)

(b) (6)

Thanks for the information regarding the COA application process.

. Would you like me to send a revised concept of operation that includes them?

I have forwarded the information to our City Solicitor so that he can prepare a declaration regarding the City's status as a political subdivision of the (b) (6)

Thanks for your help with the application process.



From: (b) (6)
Sent: Wednesday, July 30, 2014 3:47 PM

To: (b) (6)

Cc: <u>Dina.Reyes-Garcia@faa.gov</u>; <u>David.Morton@faa.gov</u>; (b) (6)

Subject: RE: Need account on (b) (6)

(b) (6)

By way of introduction my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA), Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

Based on your description of the planned use for the sUAS it appears you will not need the ability to rapidly deploy a sUAS in support of Special Response Team missions, search and rescue, disaster control, forensic photography, etc. Knowing this, the process for the approval of the COA is not as extensive as the approval to deploy to a location within a short period of time within a defined jurisdictional area and since this may be processed as just a general public agency request, I have also included Mr. Byron Chew who is responsible for processing these types of COA applications.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide the FAA with a declaration letter from the agencies City, County or State Attorney's office is forwarded to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (www.faa.gov/uas) that speaks to the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney's office (please review the attached email material on

public declarations). We cannot move forward with access to the COA On-line application program until we have the public declaration letter.

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Chew and me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, July 30, 2014 10:56 AM

To: (b) (6)

Cc: (b) (6)

Subject: RE: Need account on (b) (6)

Importance: High

(b)

Your case has been assigned to (b) (6) , our Law Enforcement liaison, who will continue to assist you.

Best-

Dina.

From: (b) (6)

Sent: Wednesday, July 30, 2014 1:42 PM

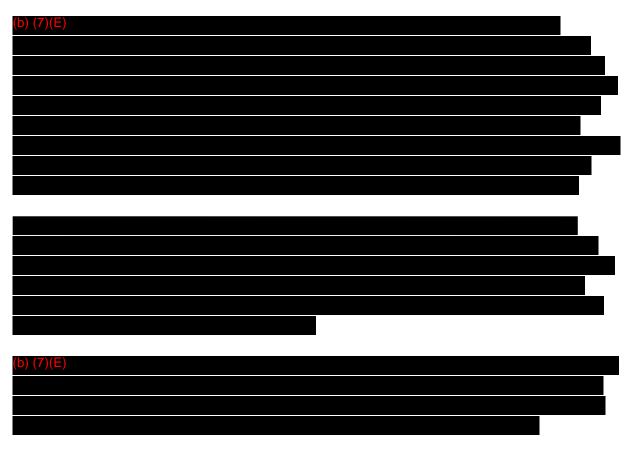
To: Reyes-Garcia, Dina (FAA)

Subject: RE: Need account on (b) (6)

Dina,

Thanks for your response. I put together a few paragraphs with our ideas:

UAS Concept of Operation – (b) (6)



Thanks for your consideration of this request. If you have any questions or need more information, please contact me at (b) (6)



From: Dina.Reyes-Garcia@faa.gov [mailto:Dina.Reyes-Garcia@faa.gov]
Sent: Wednesday, July 30, 2014 10:56 AM
To: (b) (6)
Subject: RE: Need account on (b) (6)

Importance: High

(b) (6)

Can you please provide additional information. Who is requesting the COA, description of the UAS, and the concept of operation (small paragraph will suffice).

Thank you.

From: (b) (6)

Sent: Tuesday, July 29, 2014 11:36 AM

To: Reyes-Garcia, Dina (FAA)

Subject: FW: Need account on (b) (6)

From: (b) (6)

Sent: Tuesday, July 29, 2014 11:10 AM

To: (b) (6)

Subject: Need account on (b) (6) System

Hello.

I've been tasked with obtaining a COA for operating a UAS for our City. In order to do so, I need an account on the (b) (6) System.

Can you assist me with obtaining an account?

Thanks.



From: (b) (6)
To: (b) (6)

Cc: Morton, David (FAA); Rocheleau, Chris (FAA)

Subject: RE: UAS and LE Ops

Date: Tuesday, July 29, 2014 8:06:00 AM
Attachments: COA Process Initial Itr Template.doc
Order 8900 1 Volume 16.docx

(b) (6)

As a way of introduction my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft
Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law
enforcement (LEA), Fire, and First Responder Agencies that are interested in implementing Unmanned
Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the
National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety
inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement
program resource manager, we handle LEA UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With the Initial COA Application, several documents need to be submitted by the Proponent. These documents include:

- An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
- A lost communication procedures document that addresses what actions the Pilot-in-Command (PIC) will take if there is lost communication between PIC and Air Traffic Control, as well as lost communication between PIC and the Visual Observer (VO)
- An emergency procedures document that explains the protocols that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the operator's manual, possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- Review of the agency's UAS training and proficiency program, to include all training records
- · Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (www.faa.gov/uas) that speaks to the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney's office (please review the attached email material on public declarations). We cannot move forward with access to the COA On-line application program until we have the public declaration letter.

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Unmanned Aircraft Systems Tactical Operations Section, AJV-115



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From:

Sent: Monday, July 28, 2014 3:27 PM

To: Rocheleau, Chris (FAA)

Cc: (b) (6) Morton, David (FAA)

Subject: RE: UAS and LE Ops

Chris,

Thanks for the info. I'll make a call this week.



From: Chris.Rocheleau@faa.gov [mailto:Chris.Rocheleau@faa.gov]

Sent: Monday, July 28, 2014 6:15 PM

To: (b) (6)

Cc: (b) (6) David.Morton@faa.gov

Subject: UAS and LE Ops



Ref our conversation. The two experts listed below, and cc'd here, can assist your department in pursuing UAS operations for law enforcement purposes. Please reach out to them to discuss the required approvals.

Thanks,

cr

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement, Fire and First Responders (b) (6) Liaison Supporting Federal Aviation Administration

(b) (6) (b) (6)

Dave Morton

Senior Aviation Safety Inspector

Flight Standards Service - Unmanned Aircraft Systems (UAS) Integration Office Federal Aviation Administration 202-267-8263

David.Morton@faa.gov

From: (b) (6)

To: (b) (6). (b) (

Cc: Morton, David (FAA)

Subject: RE: UAS COA

Date: Wednesday, July 30, 2014 1:20:00 PM
Attachments: COA Process Initial ltr Template.doc

COA Process Initial ltr Template.doc Order 8900 1 Volume 16.docx

(b) (6)

As a way of introduction my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law
enforcement (LEA), Fire, and First Responder Agencies that are interested in implementing Unmanned
Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the
National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety
inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement
program resource manager, we handle LEA UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide the FAA with a declaration letter from the agencies City, County or State Attorney's office is forwarded to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With the Initial COA Application, several documents need to be submitted by the Proponent. These documents include:

- An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
- A lost communication procedures document that addresses what actions the Pilot-in-Command (PIC) will take if there is lost communication between PIC and Air Traffic Control, as well as lost communication between PIC and the Visual Observer (VO)
- An emergency procedures document that explains the protocols that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the operator's manual, possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

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- · Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (www.faa.gov/uas) that speaks to the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney's office (please review the attached email material on public declarations). We cannot move forward with access to the COA On-line application program until we have the public declaration letter.

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AJV-115

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, July 30, 2014 7:29 AM

To: (b) (7)(C)

Cc: (b) (6)
Subject: RE: UAS COA
Importance: High

(b) (7)(C)

Thank you for contacting the FAA. Your case has been assigned to (b) (6) our liaison for Law enforcement, who will continue to assist you.

Best-Dina.

From: (b) (7)(C)

Sent: Monday, July 28, 2014 5:56 PM

To: Reyes-Garcia, Dina (FAA)

Subject: UAS COA

Ms. Reyes-Garcia,

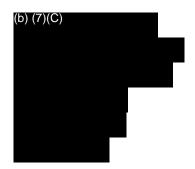
I was informed to contact you regarding setting up a COA online account.

Our agency is in the preliminary stages of ascertaining the benefits of the use of a UAS. We anticipate the UAS to be used primarily for surveillance purposes including, but not limited to, identification of suspected threats during tactical operations, providing an observation platform during incidents of natural disaster, assisting in search and rescue operations, and large outdoor crime scene photography.

The UAS we would be interested in obtaining a COA for would be the DJI Phantom 2 Quadra copter or similar.

If you have any questions, or if I have neglected to provide you with the necessary information to complete this process please contact me.

Thank you



From: (b) (6)
To: (b) (7)(C)

Cc: Morton, David (FAA)

Subject: UAS Operations in the National Airspace System

Date: Tuesday, July 29, 2014 3:01:00 PM
Attachments: COA Process Initial Itr Template.doc
Order 8900 1 Volume 16.docx

(b) (7)(C)

Great to speak with you. As a way of introduction my name is (b) (6). I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA), Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, FAA Aviation Safety inspector, who is the FAA's Unmanned Aircraft Program Office (UAPO) National Law Enforcement program resource manager, we handle LEA UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency (LEA) UAS flight operations are considered as "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives a COA application through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants assess to the COA on-Line application process, the proponent will be asked to provide the FAA with a declaration letter from the agencies City, County or State Attorney's office is forwarded to formally acknowledge that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on line program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that the Agencies Accountable Executive CANNOT Self Certify that your agency is a public agency. The responsibility to establish a legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. The initial COA (Phase I) is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits LEA's to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting LEA elements (e.g. SWAT or SRT team coordination for operational missions, search and rescue, disaster control, etc.). With the Initial COA Application, several documents need to be submitted by the Proponent. These documents include:

- An airworthiness statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the UAS will be operated and maintained in compliance with the manufacturer's operational and maintenance recommendations
- A lost-link procedures document that addresses the specific lost-link procedure that will be implemented in the event of a lost-link occurrence
- A lost communication procedures document that addresses what actions the Pilot-in-Command (PIC) will take if there is lost communication between PIC and Air Traffic Control, as well as lost communication between PIC and the Visual Observer (VO)
- An emergency procedures document that explains the protocols that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the operator's manual, possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance)

Once the Proponent feels confident that it can safely operate the UAS at a level of competency to safely support actual LEA missions, the Proponent will apply for a second operational COA (Phase II) that typically incorporates the LEA's jurisdiction. As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- Review of the agency's UAS training and proficiency program, to include all training records
- · Review of the agency's Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- Review of the Proponent's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the Proponent's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the Proponent will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of a UAS exercise to demonstrate the competency and safety of the Proponent's program

The FAA's Unmanned Aircraft Program Office (UAPO) has provided a dedicated website (www.faa.gov/uas) that speaks to the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney's office (please review the attached email material on public declarations). We cannot move forward with access to the COA On-line application program until we have the public declaration letter.

I understand that the magnitude of this information may seem a bit daunting but we developed this response to try and cover many questions that an interested agency may have. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Unmanned Aircraft Systems Tactical Operations Section, AJV-115

(b) (6)

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From: (b) (6)
To: (b) (7)(C)

Co. Marton David (FAA)

Cc: Morton, David (FAA)

 Subject:
 FW: COA - application information

 Date:
 Thursday, August 28, 2014 4:35:00 PM

 Attachments:
 COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

Importance: High

(b) (7)(C)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agency's City, County or State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to **training and**

evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- 3. A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Fire management missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates all of the agency's jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- · A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- · A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State

Attorney General's Office, County or City Attorney's office (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (b)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)

Liaison
Supporting Federal Aviation Administration
Liamanned Aircraft Systems Tactical Operations

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, August 28, 2014 8:53 AM

To: (b) (7)(C) Cc: (b) (6)

Subject: RE: COA - application information

Importance: High

Hi (b) (7)

Your case has been assigned to (b) (6) , our Law Enforcement liaison, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You can also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

Best-Dina.

From: (b) (7)(C)

Sent: Wednesday, August 27, 2014 3:38 PM

To: Reyes-Garcia, Dina (FAA)

Subject: COA - application information

Ms Reyes-Garcia,

Per our telephone conversation today I am submitting the below information to you as our initial request to begin the COA application process. Please review this information and advise me if you need anything else from the department.

Requesting Ager	<u>ICY</u>		
(b) (7)(C)			
Location of UAS	Operations		
	<u>орстанонз</u>		
(b) (7)(C)			
-			

UAS Description

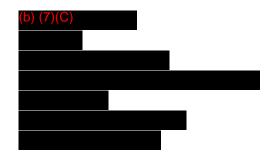
The (b) (7)(C) Police Department owns three (3) small lightweight DJI Phantom quadcopters. Two (2) of the quadcopters are Phantom II model and one (1) is a Phantom I. The specs for these quadcopters can be found at http://www.dji.com/product/phantom-2/spec.

The maximum communication range for the Phantom is 1000 meters and the Police Department plans to operate at an altitude below 400 ft.

From the Department's Published Mission Statement concerning UAS

MISSION AND PHILOSOPHY

Unmanned Aircraft and their digital image systems are a resource and tool that offer this community an ability to observe from an aerial point of view a variety of situations that may affect a specific location within (b) (7)(C) department's Unmanned Aircraft System (UAS) mission shall be to use this resource to protect lives and property in a constitutionally and legally sound manner. An aerial perspective by Unmanned Aircraft System (UAS), in the department's philosophy, may be an appropriate and vital tool in a variety of safety and hazardous situations encountered by first responders including fires, floods, search and rescue operations, special response team operations, missing persons, mass casualty incidents, HazMat incidents and apprehension of suspects. While this tool could be invaluable in completing the department's mission we recognize a community concern for privacy rights, civil liberties and a person's reasonable expectation of privacy. The (b) (7)(C) Police Department will abide by all local, state and federal regulations related to the use of Unmanned Aircraft Systems (UAS) and shall make every effort not to invade a person's privacy except by lawfully issued warrant or legal exception from the warrant requirement.



From: To:

Cc: Morton, David (FAA) Subject: FW: COA On-line access

Date: Tuesday, September 16, 2014 12:51:00 PM

Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

Importance: High

As a way of introduction, my name is (b) (6) . I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests. The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination

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- · A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

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Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, September 16, 2014 9:44 AM

To: (b) (7)(C) Cc: (b) (6)

Subject: RE: COA On-line access

Importance: High

Thank you for contacting the FAA. Your case has been assigned to (b) (6) , our Law Enforcement liaison, who will continue to assist you. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process

From: (b) (7)(C)

Sent: Tuesday, September 16, 2014 9:29 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** COA On-line access

The (b) (7)(C) Police Department is requesting online access to apply for a COA to operate a UAS inside its jurisdiction. The concept of operation is to assist in crime scene mapping, Motor Vehicle Accident reconstruction and SWAT Operations.

Thank you for your assistance



From: (b) (6)

To: (b) (7) (C)
Cc: Morton, David (FAA)

Subject: FW: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Tuesday, September 16, 2014 8:32:00 AM

Attachments: graycol.gif

pic19169.gif

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.png image002.png

Importance: High

(b) (6)

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Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJR-36-UAS

Sent: Monday, September 15, 2014 2:53 PM

To: (b) (6)

Cc: Reyes-Garcia, Dina (FAA)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Importance: High

Hj (b) (6)

Does this fall with you?

(b) (7)(C)

09/15/2014 11:59 AM

To 9-AJV-115-UASCOA/AWA/FAA@FAA,

CC

Message from www.faa.gov: 9-AJR-36-UAS@faa.gov Subject

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public operations/

Message:

To Whom It May Concern,

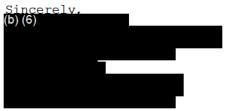
I am an assistant district attorney for (b)(6) nterested in possibly using a hobbyist gra assisting law enforcement officers and prosecutors for a number of purposes, which I have listed below.

I do not know if this makes a difference, but the type of device we would use is likely a DJI Phantom II-Vision Plus.

Naturally, we are not using it for any type of offensive operations, not would we use it in situations the use might be considered a violation constitution, the (b)(6) Constitution or any applicable Federal or (b)(6) regulation.

In order to be sure we are complying with any Federal statutes or regulations, I am seeking your assistance finding any related federal statutes or regulations that may regulate such law enforcement uses of such a device.

Any assistance you could provide would be very helpful.



Use Purposes (illustrative, not exhaustive list):

- 1. assisting game wardens in viewing property prior to entry where guns are being used
- 2. in assisting law enforcement officers executing warrants to survey property prior to entry
- 3. in assisting officers in surveying property on which a suspect is barricaded and either avoiding or actively using force to thwart lawful arrest
- 4. in assisting with the preparation for trial by creating exhibits showing crime scenes and vehicle paths (for instance creating a video showing the path a vehicle took while fleeing police in a vehicle—such a video could clearly show areas the driver could have stopped and could do so from a point of view the same or similar to the driver's actual point of view)

From: (b) (6 To: (b) (6

Cc: Morton, David (FAA)
Subject: FW: Need account created

Date: Thursday, August 28, 2014 4:48:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

Importance: High

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, August 28, 2014 12:55 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Need account created

Importance: High

Hi (b) (7)

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Best-Dina

From: (b) (7)(C)

Sent: Thursday, August 28, 2014 10:29 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** Need account created

Hello.

I am a police officer with the (b) (7)(C) Department in Indianapolis, I need to create an account to allow me to apply for a Certificate of Authorization reference the use of a UAV. Could you please let me know what is needed to create the account so I can apply for my COA?

Respectfully,





Sent from my Verizon Wireless 4G LTE smartphone

From: (b) (6) To: (b) (7)

Cc: Morton, David (FAA)
Subject: FMA OF (AAA System Asset

Subject: FW: OE/AAA System Access
Date: Monday, August 25, 2014 1:32:00 PM

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

Importance: High

(b) (7)(C)

Attachments:

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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
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Respectfully,

Senior Aviation Analyst Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

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From: Reyes-Garcia, Dina (FAA) **Sent:** Friday, August 22, 2014 1:00 PM To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: FW: OE/AAA System Access

Importance: High



Thank you for contacting the FAA. You case has been assigned to (b) (6) Enforcement liaison, who will continue to assist you with your request. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more about COAs and the COA process.

Best-Dina.

From: oeaaa_helpdesk [mailto:oeaaa_helpdesk@cghtech.com]

Sent: Thursday, August 21, 2014 11:53 AM

To: Reyes-Garcia, Dina (FAA)

Subject: FW: OE/AAA System Access

From: (b) (6), (b) (7)(C)

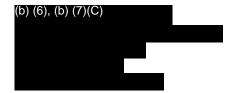
Sent: Thursday, August 21, 2014 11:40 AM

To: oeaaa_helpdesk

Subject: OE/AAA System Access

I am interested in obtaining online access to the OE/AAA system in order to submit a COA application in order to utilize a UAS for our police department. Please advise on what I need to do for a user name and password.

Thanks, (b) (6), (b)



From: (b) (6)
To: (b) (6), (b) (7)(C)

Co. Marton Pavid (FAA)

Cc: Morton, David (FAA)

Subject: FW: Request for COA On-line access - (b) (6), (b) (7)(C)

Date: Tuesday, September 23, 2014 10:56:00 AM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

Importance: High

(b) (6), (b) (7)(C)

As a way of introduction, my name is b (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law
enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned
Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the
National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety
Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement
program resource manager, we handle Fire Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

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STEP TWO.

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STEP THREE.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, September 23, 2014 7:44 AM

To: (b) (6), (b)

Cc: (b) (6)

Subject: RE: Request for COA On-line access - (b) (6), (b) (7) Police Dept.

Importance: High

Thank you. Your case has been assigned to (b) (6) , our Law Enforcement liaison, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Monday, September 22, 2014 5:20 PM

To: Reyes-Garcia, Dina (FAA)

Subject: RE: Request for COA On-line access - (b) (6), (b) (7) Police Dept.

Hello,

I do not have a model or description yet on the UAS, since one has not been decided on by our department. The operation would be used for emergency situations such as, search warrants, barricaded suspects, active shooters, SWAT call-outs, missing children. Once I have a UAS description, I will gladly send it over to you.

Thanks,



>>> <<u>Dina.Reves-Garcia@faa.gov</u>> 9/22/2014 2:25 PM >>>

Please provide additional information a) a small description of the UAS and b) the concept of operation.

Thank you.

From: (b) (6), (b) (7)(C)

Sent: Friday, September 19, 2014 10:47 AM

To: Reyes-Garcia, Dina (FAA)

Subject: Request for COA On-line access - (b) (6), (b) (7) Police Dept.

Hello Dina Reyes,

I am (b) (6), (b) (7)(C) from the (b) (6), (b) (7) Police Dept, in (b) (6), (b) (7)(C). I am requesting a login/pass for access to the on-line COA please, so as to complete an application.

Dept Info:



From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Morton, David (FAA)

Subject: FW: UAV/UAS COA

Date: Wednesday, September 17, 2014 4:57:00 PM

Attachments: COA Process Initial Itr Template.doc
Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

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Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: (b) (7)(C)

Sent: Wednesday, September 17, 2014 02:27 PM

To: Morton, David (FAA) Subject: UAV/UAS COA

Hello,

I was given your contact information about obtaining an application for a COA for our agency. We are wanting to expand our abilities to serve the citizens of (b) (6) by incorporating a DJI Phantom quadcopter, and possibly a Draganfly Quadcopter with FLIR to our search and rescue team.

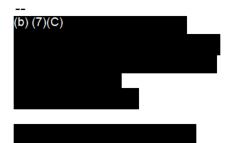
We are also wanting to look at these for use on near fatal /fatal crashes to help reconstruct the scene for our crash team. If this is acceptable, I would like to know what the process is for getting the COA and what other types of uses would be allowed under this certificate.

We understand the privacy issues involved and will not be using these for surveillance or any other evidence gathering that would normally require a search warrant. As with any new technology, we understand that you are busy trying to make sure these don't end up violating anyone's rights. This is why I am writing you to get the parameters of operation and authorization.

Thank you for your time, and I look forward to hearing from you.

Sincerely,





From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Morton, David (FAA)
Subject: Operating a UAS in the NAS

Date: Monday, September 22, 2014 2:55:00 PM

Attachments: ac91-57.pdf

Order 8900 1 Volume 16.docx



I have attached two documents to this email. The one is the Advisory Circular 91-57 that I spoke of on the phone. The other may be an updated document to the 8900.227 that I sent to you back on February 25th.

So when the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement/SAC-EC Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

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From: (b) (6)
To: (b) (6)

Subject: Operating an Unmanned Aircraft System in the National Airspace System

Date: Thursday, September 25, 2014 11:14:00 AM

Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

(b) (6)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

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Enforcement program resource manager, we handle Fire Agency UAS requests.

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When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agency's, County or State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the County or State Attorney General and their appropriate legal counsel.

STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to **training and evaluation** activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight

proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- 3. A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- · A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries
 of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant
 hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to
 mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or County Attorney (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: (b) (6)

To: (b) (6)

Cc: Morton, David (FAA)

CC: Morton, David (FAA)

Subject: RE: Automatic reply: (6) (6) COA Account Request

Date: Monday, August 25, 2014 3:49:00 PM
Attachments: COA Process Initial Itr Template.doc
Order 8900 1 Volume 16.docx

(b) (6)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

So if the plan is to regionalize an operation where several agencies would benefit from the deployment of a single UAS system, we would still need to identify the Public agency that would be the proponent to the Certificate of Waiver/Authorization (COA). If your company, PHASTAR Corporation, will be assisting that entity in development of the COA then I would need an email from that proponent acknowledging that your company or an individual within your company would be representing the Proponent in all issues relating to the development of the COA and can respond to any and all inquiries and questions.

So, when the FAA receives an application for a COA through the FAA's "COA On-line" process, the FAA initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agency's City, County or State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (**not for Commercial Purposes**). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they

will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- 1. An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- 3. A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .. "What will you do if something bad happens?).

STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Fire management missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates all of the agency's jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- · A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to

mitigate any attendant hazard for UAS)

• An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney's office (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement, Fire and First Responders (b) (6)
Liaisor Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AJV-115/AFS-85
(b) (6)

From: (b) (6)

Sent: Monday, August 25, 2014 12:05 PM

Subject: FW: Automatic reply: (b) (6) Corporation COA Account Request

(b) (6)

Good afternoon. I received your contact information from (b) (6) in (b) (6) . He and I are working with a local police department and several public safety agencies to field a regional UAS team. Our efforts are aimed at coordinating the local services into one, well equipped, well organized and highly trained regional deployment team.

We have been working on this for several months and are currently tied up with the COA process, (first correspondence sent in July). I have sent two requests for online account set up information and don't seem to be getting anywhere. We have several training exercises approaching that we had hoped to participate in and would appreciate any guidance on this process.

Thank you for your time and assistance.

Sincerely,

(b) (6)

President



Sent from Yahoo Mail for iPad

From: Dina.Reves-Garcia@faa.gov;

To: (b) (6) >;

Subject: Automatic reply: (b) (6) COA Account Request

Sent: Wed, Aug 13, 2014 3:02:40 AM

Thank you for contacting the FAA. I am currently out of the office. Please visit our website at www.faa.gov/uas to learn about Unmanned Aircraft Systems (UAS) and Certificates of Waiver or Authorization (COAs).

If you are a new applicant and would like to apply for a COA, in an email please provide the name of the public entity, a small description of the UAS, and the concept of operation (small paragraph will suffice). I will respond to your email in the order it was received when I return to the office. Please visit our website (www.faa.gov/uas) to determine if you qualify.

If you already have an account and need help with your username/password (i.e., reset, unlock) please follow the instructions listed below.

If you already have an account and need assistance with the COA process or are inquiring about the status of your COA, please contact your assigned ATC Specialist (COA Processor).

If you would like more information on special airworthiness certificates, please contact Thomas Rampulla at thomas.rampulla@faa.gov.

I will respond to all emails in the order they are received when I return to the office.

Have a wonderful day. Keep safe!

Accounts

- 1. Your full email address is your login ID and is required to login to the OE/AAA system (i.e., jane.doe@faa.gov or mark.r.smith@us.army.mil).
- 2. Take care when logging in, the system enforces a "3 try limit" on the number of consecutive invalid login attempts by a user.
- 3. If the maximum number of unsuccessful attempts is exceeded, the OE/AAA system will automatically lock your account and delay your next login for 20 minutes (Per FAA order 1370.92 3).
- 4. After the 20 minute delay, the system enforces a "1 try limit." If your attempt is unsuccessful (4 or more consecutive invalid login attempts), the OE/AAA system will lock

your account again and delay your next login for 20 minutes

Forgot Password

If you can't remember your password, do the following:

On the log-in screen, select the "Forgot Password" button.

- 2. Enter your full e-mail and submit your request.
- 3. The system will validate and e-mail you a web link to reset your password and regain access to your account. If your account is locked and you immediately change your password, you MUST STILL WAIT until the 20 minute delay ends, BEFORE you can use the new password with the "1 try limit".

Note: Successful login, after a lock delay, returns your account to the system "3 try limit" for the number of consecutive invalid login attempts allowed.

From: To:

Cc: Chew, Byron (FAA); Morton, David (FAA)

Subject: **RE:** COA Application

Date: Friday, August 29, 2014 10:54:00 PM Attachments: COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

b) (6)

As I related on the phone the first step in getting your agency access to the COA online program is to complete the public declaration letter by your city, county or state attorney's office declaring your agency a political subdivision of the (b) (6) for the purposes of operating as a public aircraft operator. This is further explained below. And understand that due to the nature of the type of missions that law enforcement, fire and first responder agencies are engaged in we developed a unique program that allows for a more rapid response to events that require a level of immediacy. For other public agencies the standard Certificate of Waiver/Authorization COA) process is in place. For the public declaration letter your city or county attorney could either address both the police vision and public relations division in a single letter or prepare two separate documents that address each division separately. For the <u>Public</u> Relations Division Mr. Byron Chew (his email address is attached) will be the point of contact. So The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement and public relations agencies as part of a city would be considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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For the Law Enforcement Division the FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

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 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
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- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

For your <u>Public Relations Division</u> we only issue a COA that will address an individual location or maybe a few locations that will be the operating location for the unmanned aircraft. These sites will be scrutinized based upon the risk to the NAS to ensure operations do not pose an undue risk. Operating locations within highly populated areas or close to airports are challenging locations that may not be acceptable to the FAA. As with the law enforcement application process the FAA will conduct an extensive review of the application to ensure safety to the NAS.

With the <u>Law Enforcement Division COA</u> once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates all of the agency's jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- · A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- \cdot $\,$ An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney's office (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this

response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton, Mr. Chew or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6) Senior Aviation Analyst Air Traffic and Law Enforcement (b) (6) Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115 (b) (6)

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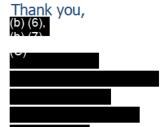
From: (b) (6) Sent: Friday, August 29, 2014 10:03 AM

To: (b) (6) Cc: (b) (6), (b) (7)(C)

Subject: RE: COA Application

Hello (b) (6),

Thank you for your response. I am (b) (6). (b) (7)(C) , he will be the point of contact for our UAS program, and I'll be assisting him in the administrative part such as the application process. Also we are requesting two permits, one for the Public Relations Division and one for (b) (6). (b) Division, the intended use for the UAS's differ from one another. Public Relations plans to use their UAS for (b) (6). (b) (7)(C) PR needs and (b) (6). (b) Division will use their UAS for law enforcement purposes. I know you are the Law Enforcement liaison for FAA, will we need to be referred to and additional person for the Public Affairs permit?



From: (b) (6)

Sent: Friday, August 29, 2014 5:34 AM

To: (b) (6), (b) (7)

Subject: RE: COA Application

Here is the attachment.

From: (b) (6)

Sent: Friday, August 29, 2014 5:30 AM

To: (b) (6), (b) (7)(C)

Cc: Morton, David (FAA); (b) (6), (b) (7)(C)

Subject: FW: COA Application

Importance: High

(b) (6), (b) (7)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

I received an email from a (b) (6), (b) (7)(C) who I provided information on operating a UAS in the NAS. Would you please coordinate with him and let me know who will be the point of contact for a UAS program within your agency.

The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6)

Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, August 28, 2014 2:43 PM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: COA Application

Importance: High



Your case has been assigned to (b) (6) , our Law Enforcement liaison, who will continue to assist you with the COA process. Please be advised that your request will be responded to in the order it was received. You can also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

Best-Dina.

From: (b) (6), (b) (7)(C)

Sent: Thursday, August 28, 2014 1:37 PM

To: Reyes-Garcia, Dina (FAA) Subject: COA Application

Hi Dina,

Thank you for getting back to me regarding the COA application. The Port of Los Angeles is a government agency that oversees all port operations. We would like to obtain COA's for our (b) (c), (b) Division and Public Relations Division. Both divisions will be using a Phantom 2 Quadcopter. The (c) (c), (b) Will operate Unmanned Aircraft Systems (UAS) in support of current Port Police missions. The (c) (d), (e) Will utilize UAS in order to conduct radiological and nuclear materials detection operations within the Port. UAS operations may also be conducted in support of hazardous materials incident response and search and recovery operations within the Port. The Public Relations Division will operate Unmanned Aircraft Systems (UAS) in support of aerial photography and videography assignments over Port property. Such photography and videography is used to inspect and document construction projects, cargo terminals and related cargo-handling equipment, as well as promote the Port with aerial views of LA Waterfront sites and attractions. Please let me know if you need any more information.



------Confidentiality Notice-----

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------Confidentiality Notice------

This electronic message transmission contains information from the Port of Los Angeles, which may be

(b) (6)

From: To:

Cc: Morton, David (FAA)

Subject: RE: COA for University Police Dept Date: Tuesday, August 19, 2014 3:12:00 PM Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

As a way of introduction, my name is (b) (6) . I am a contractor with (b) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

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When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-ofcontrol link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
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STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Fire management missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates all of the agency's jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- · A review of the agency's UAS training and proficiency program, to include all training records
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- · A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office (please review the attached email material on public declarations). The FAA

cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement, Fire and First Responders/(b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AJV-115/AFS-85

(b) (6)

From: Gardner, Scott (FAA)

Sent: Tuesday, August 19, 2014 4:07 AM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: RE: COA for University Police Dept

(b) (6), (b) (7)

I am forwarding your request to our specialist that handles Law Enforcement authorizations, on the can give you a better idea of the process for law enforcement.

Thank you.

Scott Gardner
Air Traffic Specialist, UAS Tactical Operations Section, AFS-85/AJV-115
FAA Headquarters
490 L'Enfant Plaza, SW
Suite 3200
Washington, DC 20024

Washington, DC 20024 Ph: 202-267-8192

From: (b) (6), (b) (7)(C)

Sent: Tuesday, August 19, 2014 1:19 AM

To: Gardner, Scott (FAA)

Subject: COA for University Police Dept

(b) (6), (b) (7)

I am a Police Officer at The Butler University Police Department, in Indianapolis, Indiana.

I have been corresponding with (b) (6) to get an idea of what steps we need to take in order to acquire a COA for a Quad copter.

Our initial intention was to use the UAV to monitor traffic/parking lots during Basketball Games and other large events on campus. We also intended on getting video/photo footage for the University to use for marketing purposes.

The more research I do on UAVs and their role in Law Enforcement, I have realized there are many more instances where a quad copter could be utilized. The first one that comes to mind is an active shooter situation. Another would be monitoring crowds during large outside events, and I am sure there are many that we haven't even thought of yet.

What is my first step to get the process started? I called the support number on the site yesterday but had to leave a message.

(b) (6) gave me your contact info as the subject matter expert on COAs and Law Enforcement Agencies.

Any info or help you can provide would be greatly appreciated.

Respectfully,

(b) (6), (b) (7)

(b) (6), (b) (7)(C)

Butler University Police Department (b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6),

Cc: Morton, David (FAA)
Subject: RE: COA Online Access

Date: Wednesday, August 13, 2014 7:01:00 PM
Attachments: COA Process Initial Itr Template.doc
Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

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working for the Federal Aviation Administration Unmanned Aircraft

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The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or County Attorney's office (please review the attached email material on public

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement, Fire and First Responders (6) (6) Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AJV-115/AFS-85

(b) (6)

From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, August 13, 2014 11:53 AM

To: (b) (6), (b)

Cc: (b) (6)

Subject: RE: COA Online Access

Importance: High

(b) (6),

Thank you for contacting the FAA. Your case has been assigned to (b) (6), our Law Enforcement liaison, who will continue to assist you with the COA process.

Best-

Dina.

From: (b) (6), (b) (7)(C)

Sent: Tuesday, August 12, 2014 1:37 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** COA Online Access

Hello Dina,

I received instructions from (b) (6), (b) (7)(C) , to email you regarding the Linn County Sheriff's Office (LCSO) access to the COA website.

The Linn County Sheriff's Office will be seeking a COA to permit the restricted use of a DJI Phantom Vision 2+ quadcopter to be flown by trained LCSO personnel during future Search and Rescue operations, within Linn County, Oregon outside of densely populated areas, within line-of-sight of the operator, within Class G airspace not to exceed 400 feet above ground level, not within 3 mile of any registered state or municipal airports (Albany Municipal Airport - FAA LID: S12 and Lebanon State Airport - FAA LID:S30), and in cooperation with and notice to Air Route Traffic Control Center SEATTLE and Flight Service Station

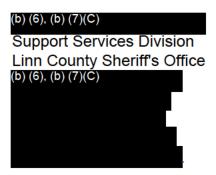
MCMINNVILLE. Furthermore, we will operate the mentioned quadcopter within LCSO policies and procedures, as well as follow established Oregon laws. We will be seeking a COA for two years from the date of issuance, if that term is agreeable to the FAA.

I will be the single point of contact for this application process, and my contact information is below.

Thank you very much for your expertise and assistance with this matter moving forward. We are very excited to work with the FAA on this project in our county, and to do it right! I look forward to hearing from you soon on an account to begin the COA process.

Thank you very much for your time.

Best,



From: (b) (6 To: (b) (6

Cc: Morton, David (FAA)

Subject: RE: COA site access request

Date: Friday, September 12, 2014 4:27:00 PM
Attachments: COA Process Initial Itr Template.doc
Order 8900 1 Volume 16.docx

(b) (6)

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Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.

From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, September 11, 2014 8:56 PM

To:

Cc: (b) (6), (b) (7)(C) (b) (6)

Subject: RE: COA site access request

Importance: High



Thank you for contacting the FAA. Your request has been assigned to (b) (6), our Law Enforcement liaison, who will continue to assist you. Please be advised that your email will be responded to in the order it was received. You can also visit our website (www.faa.gov/uas) for more information on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Monday, September 08, 2014 6:23 PM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6), (b) (7)(C)

Subject: COA site access request

(b) (6),

I was direct to you to gain access to the COA site to apply for a Certificates of Waiver or Authorization. I am attached to the Wagoner Police Dept. in the city of Wagoner, in the State of Oklahoma. We our making plans to move forward with a small drone UAV division that would be involved in search & rescue, surveillance, hazmat mitigation and to aid fire fighters in fire suppression. Please grant access to your site so we may make application for the COA waiver.



From: (b) (6)

To: (b) (6)

Cc: Morton, David (FAA)

Subject: RE: Drone License

Date: Tuesday, September

Date: Tuesday, September 02, 2014 2:40:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

Public Declaration Letter Template Example.docx

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I have attached our typically introduction data dump with includes an explanation from the FAA legal office on the public declaration letter. I have also included a draft exemplar on what the letter should contain but this document has not been approved by the FAA legal office so I can make no guarantees that it will be acceptable however it seems to contain the appropriate language that the legal office would

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free

to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

b) (6)

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From: (b) (6), (b) (7)(A)

Sent: Friday, August 29, 2014 2:32 PM

To: (b) (6)

Subject: Drone License

(b) (6)

Our agency is considering purchasing a small quad copter drone and using it for official police business. (b) (6) with Northwestern Michigan College in Traverse City gave me your name for assistance in going through the licensing process. Could you provide me with an example letter, which I understand is required from our Michigan AG stating that we are a public organization and that our aircraft is a public aircraft? Also do you have any documentation that gives me direction or assists me with the steps in the process? Thank you for your help on this matter!!!

From: (b) (6)
To: (b) (6)

Subject: RE: interested in applying for a FAA COA

Date: Tuesday, August 19, 2014 1:26:00 AM

Attachments: COA Process Initial Itr Template.doc
Order 8900 1 Volume 16.docx

(b) (6)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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STEP THREE.

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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City attorney's office (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web

site until they have received the agency's public declaration letter.

Reference your inquiry about another agency within your location, I would contact Anthony Galante from the Daytona Beach Police Department who should be able to assist you with your inquiry.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement, Fire and First Responders (6) (6) Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AJV-115/AFS-85

(b) (6)

From: (b) (6), (b) (7)(C)

Sent: Friday, August 15, 2014 9:12 AM

To: (b) (6)

Subject: interested in applying for a FAA COA

Good afternoon,

(b) (6), (b) (7)(C) with the City of Myrtle Beach Police Department in South Carolina here. I have been tasked by my Chief of Police to implement a UAV program in my agency. I understand that receiving a FAA COA is one of the biggest steps.

I am wondering if you can send me more information on how to go about this the correct way from the start? Also if you can share any agencies that have gone through this process that are near Myrtle Beach I would appreciate it.

Thanks in advance, have a great weekend

(b) (6), (b) (7)



*** WARNING *** All e-mail correspondence to and from this address may be subject to

public disclosure under the South Carolina Freedom of Information Act(FOIA). 2007

From: (b) (6)

To: (b) (6), (b) (7)(C)

Subject: RE: LEO sUAS Usage

Date: Thursday, September 25, 2014 8:01:00 AM

Attachments: Order 8900 1 Volume 16.docx
COA Process Initial Itr Template.doc

(b) (6), (b) (7)

There has been no significant changes to the use of small unmanned Aircraft Systems since our last discussion back in May 2011 (I have been through two different contractors). The COA process document has been updated with the 8900.1 which I have attached. And here is the typical information I provide to interested parties.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,



Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Wednesday, September 24, 2014 2:04 PM

To: (b) (6)

Subject: LEO sUAS Usage

(b) (6)

It's been a few years since my last inquiry about sUAS for law enforcement use. I was just curious if there have been any informational changes or increase in usage of these new systems. It seems, several sUAS vendors and commercial sUAS operators have popped up with little information regarding the FAA requirements.

Thanks, (b)

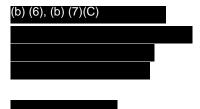


From: (b) (6)

Sent: Monday, May 09, 2011 11:43 AM

To: (b) (6), (b) (7)(C)

Subject: Fw: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov



My name is (b) (6) . I am a consultant working for the Federal Aviation Administration Unmanned Aircraft Systems Group (AJV-13). I am the coordinator for law Enforcement agencies who are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS).

Before you can operate a unmanned aircraft in the NAS (your department is classified as a public entity) you will need to have an approved Certificate of Authorization/Approval (COA) by the Federal Aviation Administration (FAA). The FAA is the responsible Federal Entity for the approval of UASs to conduct flight operations in the NAS and as such they are responsible for the processing, reviewing and approving of

UAS operations. To complete that assessment the Certificate of Authorization/Approval (COA) on-line Application process is utilized. This application process provides the FAA with the proponents information, the operational description of the mission, performance characteristics of the UAS technology to be utilized, airworthiness of the platform, procedures for the flight of the system, UAS communications, system lost communication, lost Link, emergency procedures, flight aircrew and observer qualifications and the location of the mission. This is an extensive process that is not approved overnight.

The FAA web site is located at http://www.faa.gov/about/initiatives/uas/ which can provide you with information on the COA process. Additionally I have attached two documents for your review; the COA Sample application and the FAA's Interim Operational Approval Guidance 08-01 which addresses Unmanned Aircraft Systems Operations in the U.S. National Airspace System and the limitations to operations within the NAS.

Some additional considerations include:

The Law Enforcement Agency (LEA) as a public Entity will need to made a determination on the Airworthiness and Safety of the UA technology and the UA must operate in strict compliance with all the provisions and conditions in accordance with the manufactures specifications.

The Pilot in Command and Observer(s) will as a minimum (based on the flight location and operating Altitude) have completed a private pilot written exam and passed an approved FAA class 2 medical exam. All crewmembers including the PIC and visual observers must receive formal training under the direct supervision of a qualified instructor.

In the event of lost link where the Pilot in Command (PIC) looses communication and subsequent control of the aircraft, the aircraft autopilot will enter into some type of predictable fail-safe mode (independent flight termination feature) and either "Auto land" or fly a programmed flight trajectory so as to regain command and control or transition to a point where the UA will land.

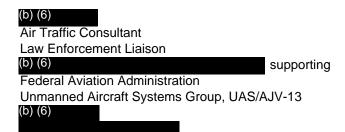
When you are ready to start the Certificate of Authorization/Approval process please send me an email that provides;

Address and contact information for your agency.

The name and manufacture of the UA technology you will be utilizing.

Please feel free to contact me with any questions. I look forward to working with your office in developing an unmanned aircraft program.

Sincerely,



From: To: Cc: Morton, David (FAA)

Subject: RE: Login and Password request - OE/AAA System

Date: Monday, September 15, 2014 4:46:00 PM Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

b) (6), (b) (7)

As a way of introduction, my name is (b) (6) . I am a contractor with (b) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests. The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS

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Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Monday, September 15, 2014 12:31 PM

To: (b) (6), (b) (7)(C)
Cc: (b) (6), (b) (7)(C)

Subject: RE: Login and Passowrd request - OE/AAA System

Importance: High



Thank you for contacting the FAA. Your request has been assigned to (b) (6) , our Law Enforcement liaison, who will continue to assist you. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more about COAs and the COA process itself.

From: (b) (6), (b) (7)(C)

Sent: Monday, September 15, 2014 1:37 PM

To: Reyes-Garcia, Dina (FAA)

Subject: FW: Login and Passowrd request - OE/AAA System

The Hamilton County Sheriff's Office, Hamilton County, Tennessee is moving towards using the PHANTOM 2 VISION + flying camera systems for the following purpose:

To conduct operations that is supported under Tennessee State Law / 39-13-609 – Freedom from unwarranted Surveillance Act-Use of drones to gather evidence or information (see attached for complete statute);

39-13-609 allows the use of a system like the PHANTOM 2 VISION +

- (d) This section shall not prohibit the use of a drone:
 - (1) To counter a high risk of a terrorist attack by a specific individual or organization if the United States secretary of homeland security determines that credible intelligence indicates that there is such a risk;
 - (2) If the law enforcement agency first obtains a search warrant signed by a judge authorizing the use of a drone;
 - (3) If the law enforcement agency possesses reasonable suspicion that, under particular circumstances, swift action is needed to prevent imminent danger to life;
 - (4) To provide continuous aerial coverage when law enforcement is searching for a fugitive or escapee or is monitoring a hostage situation; or
 - (5) To provide more expansive aerial coverage when deployed for the purpose of

searching for a missing person.

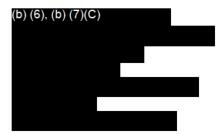
The PHANTOM 2 VISION + will also be used to document major crime scenes that occur outdoors and traffic crashes that involve death that occur on the roadways within the boundaries of Hamilton County.

This operation will be tightly controlled and will only be deployed as set out in an operational directive citing the following:

- 1. Will only be used under the pilot control and support officer;
- 2. Will only be flown under visual flight;
- 3. Will not be flown higher that 400';
- 4. Will not be operated near the Chattanooga Metropolitan Airport, Dallas Bay Sky Park or the Collegedale Municipal Airport unless a major event has occurred and the FAA has been notified.

The Hamilton County Sheriff's Office is requesting to file a request for a Certificate of Authorization (COA) or Waiver through the OE/AAA System. Please provide me a log in and password so this process can be completed.

Respectfully,



From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Morton, David (FAA)

Subject: FW: Submission of Form 711-2

Date: Wednesday, October 08, 2014 8:33:00 AM

Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

ac91-57.pdf

(b) (6), (b) (7)

As a way of introduction, my name is b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle law Enforcement, Fire and First Responder Agency UAS requests.

Mr. Morton asked if I would respond to your questions. The FAA has several different programs in effect to facilitate the integration of UASs into the National Airspace System (NAS). For those interested in using UAS as a hobbyist for recreational purposes, FAA Advisory Circular 91-57 is the guiding document for this use. The FAA currently authorizes UAS operations that are not for hobby or recreation purposes through one of three avenues: (1) the issuance of Certificates of Waiver or Authorization COA) (issued to Public Entities; e.g. Federal, State, County, or City law enforcement/Fire or emergency services agencies, Federal, State, County or City Public Agencies or Public Universities) (2) the issuance of airworthiness certificates (issued to civil operators typically for R&D, Crew Training and market research) and (3) the issuance of an exemption under part 11 of title 14, Code of Federal Regulations that relies on section 333 (Special Rules for Certain Unmanned Aircraft Systems) of the Act for relief from the airworthiness certificate requirement. Further, the FAA is engaged in rulemaking that will provide a regulatory environment for the operation of small UASs by the general public however this sUAS rulemaking has not been published for comment and the expectation is that this new rule making will not be available until the 2015 timeframe.

Based on the information you have provided it would appear that if you wished to offer the commercial use of a UAV to the local ranchers and farmers you could either request an exemption for the operation of your UAS under the section 333 (Please see FAA web site that speaks to 333 exemptions: http://www.faa.gov/uas/legislative_programs/section_333/) or wait until rule making comes out that would allow you to operate as a commercial operator under the sUAS rulemaking which as I mentioned above should occur late next year. I should also say that this new rulemaking has been in coordination for several years now and although I do not have visibly on the status of the program I have no indication that this will be available as scheduled.

However to operate in support of your law enforcement agency you could request a COA. For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document. Please understand that you cannot provide services to your agency since you would be considered a commercial operation which is currently not authorized however your agency could be the proponent and under their public aircraft status you could operate. Below describes the process for the use of a small Unmanned Aircraft System within the National Airspace System.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency

initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agency's City, County or State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the State Attorney General, County or City Attorney and their appropriate legal counsel.

STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to **training and evaluation** activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- 3. A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates all of the agency's jurisdiction (city,

county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- · A review of the agency's UAS training and proficiency program, to include all training records
- · A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, October 07, 2014 10:20 PM

To: Morton, David (FAA)

Subject: Submission of Form 711-2

Mr. Morton,

Hello Sir, I hope this email finds you doing well. My name is (b) (6), (b) (7)(C) . I was given your information in reference to filing for a Certificate of Authorization. I am sending you this email to ask you the best way to submit the application. I do have all of the information filled out and the form signed.

For just a general overview, I live in a rural community and would like to offer the commercial use of a UAV to the local ranchers and farmers. I am also a (b) (6), (b) (7)(C) and have plans on using the UAV on search and rescue operations. There have been several previous situations in which the use of a UAV would have beneficial. I plan on my 15 year old son assisting with the operation (possibly not the flying), unless something happens while I'm on duty for the Sheriff's Office. If the latter happens, my son will not be with me. However, I am sure that I can get someone to assist me. I also have a NAVCOM radio in order to monitor local air traffic. The area that we live in is Class E Airspace.

Thank you for your time and attention. I will send the form whichever way is most convenient.

Sincerly,

(b) (6), (b) (7)

From: (b) (6)
To: (b) (6),

Cc: Morton, David (FAA)
Subject: RE: Account Request

Date:Friday, October 03, 2014 1:18:00 PMAttachments:COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png



As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

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STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to **training and**

evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
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STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- · A review of the agency's UAS training and proficiency program, to include all training records
- · A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- · An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or County Attorney (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this

response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJR-36-UAS

Sent: Friday, October 03, 2014 7:46 AM

To: (b) (6), Cc: (b) (6)

Subject: RE: Account Request

Importance: High

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



- 1). Livingston County Sheriff Department Howell, Mi
- 2) DJI Phantom 2Vision +
- 3) UAS will be used to video and photograph major / fatal crash scenes along with outdoor crime scenes.



Sent To: (b) (6), (b) Subj(7)(C) Y, October 02, 2014 10:40 AM Account Request

Please provide the following information: (1) public agency requesting the COA (2) small description of UAS and (3) concept of operation.

(b) (6), (b) (7)(C)

10/02/2014 04:58 AM

To 9-AJV-115-UASCOA/AWA/FAA@FAA, cc

Subject Account Request

FAA,

I am requesting an online account ID and password for application of a ${\tt COA}$ for UA system.



From: To: Cc: Morton, David (FAA)

Subject: **RE: COA Access Request**

Friday, September 26, 2014 4:04:00 PM Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

Date:

As a way of introduction, my name is (b) (6) . I am a contractor with (b) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

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- · A review of the agency's UAS training and proficiency program, to include all training records
- · A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Friday, September 26, 2014 12:27 PM

To: Abell, Dustin

Cc: Pansky, Steven CTR (FAA)
Subject: RE: COA Access Request

Importance: High

Thank you for contacting the FAA. Your case has been assigned to our Law Enforcement liaison, Mr. Steve Pansky, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: Abell, Dustin [mailto:Dustin.Abell@state.vt.us]

Sent: Friday, September 26, 2014 1:31 PM

To: Reyes-Garcia, Dina (FAA) Subject: COA Access Request

Hello,

I need to apply for a COA for use of a sUAS on behalf of the Grand Isle County Sheriff's Department in Vermont.

We will be operation a small quadcopter outfitted with video downlink and FLIR infrared camera for use in Search and Rescue operations.

Thank you,

Dustin Abell



From: Lewis, Derwin [mailto:dlewis@cghtech.com]

Sent: Friday, September 26, 2014 1:28 PM

To: Abell, Dustin

Subject: COA Access Request

Dustin,

To request COA On-line access to apply for a COA.

Email <u>dina.reyes-garcia@faa.gov</u>, the COA On-line administrator with:

The name of the government agency/university that is requesting the COA and the concept of operation.

Please view the UAS web page at http://www.faa.gov/uas or email the FAA/UAS office at 9-AJR-36-UAS@faa.gov with any questions or for more information regarding Certificates of Waiver or Authorization.

Derwin Lewis
Support Desk Staff
202-580-7500
oeaaa helpdesk@cghtech.com

From: (b) (6)
To: (b) (6)

Cc: Morton, David (FAA)

Subject: RE: COA Information Request

Date: Tuesday, October 14, 2014 10:17:00 PM
Attachments: COA Process Initial Itr Template doc

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6)

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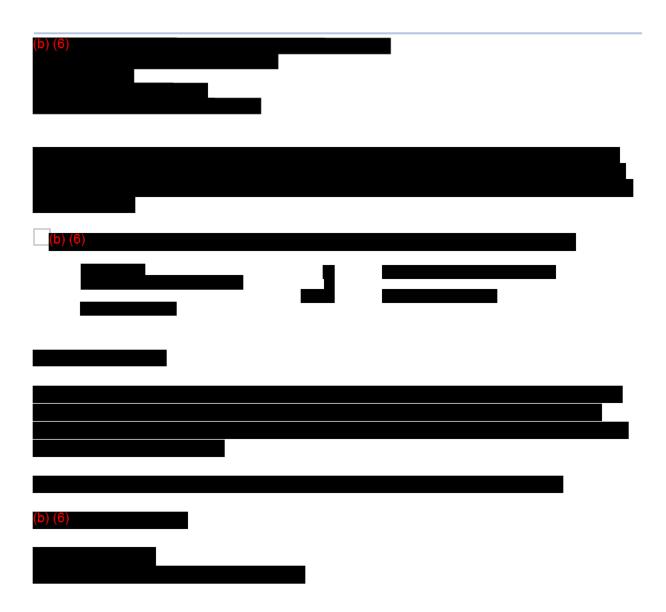
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Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.





om www.faa.gov: 9-AJR-36-UAS@faa.gov ber 26, 2014 4:41:00 PM

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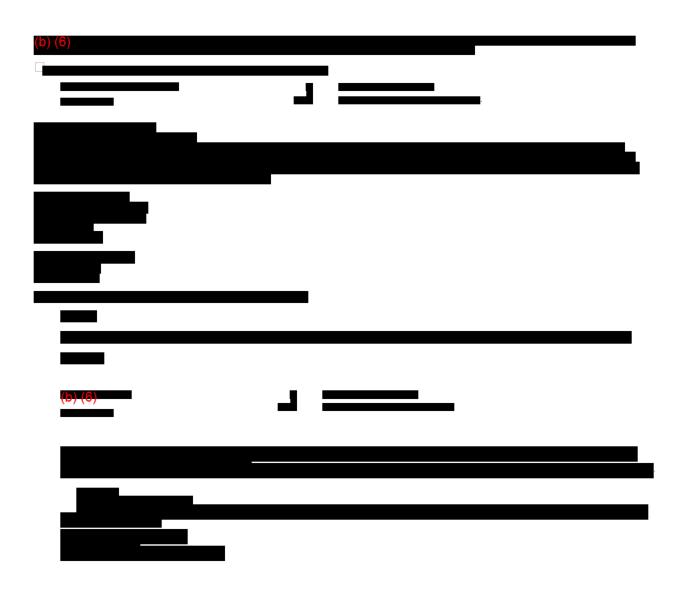
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(b) (6)

Air Traffic and Law Enforcement/SAC-EC Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115







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To: (h) (6)
Cc: Morton David (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Friday, September 26, 2014 5:11 00 PM
Attachments: COA Process Initial Itr Template.doc
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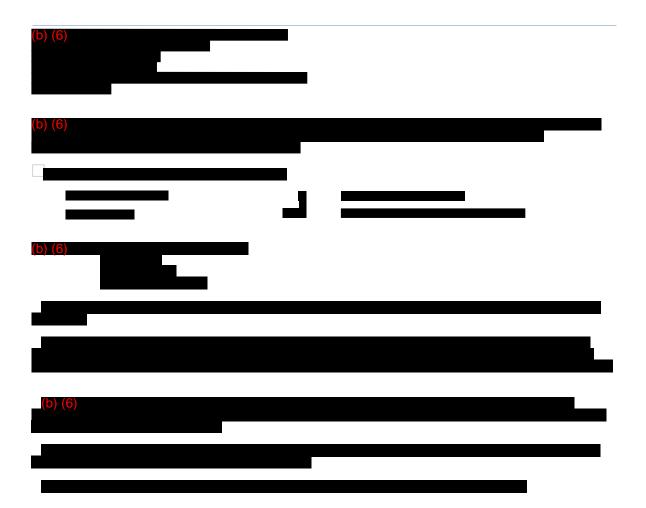
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Morton, David (FAA)

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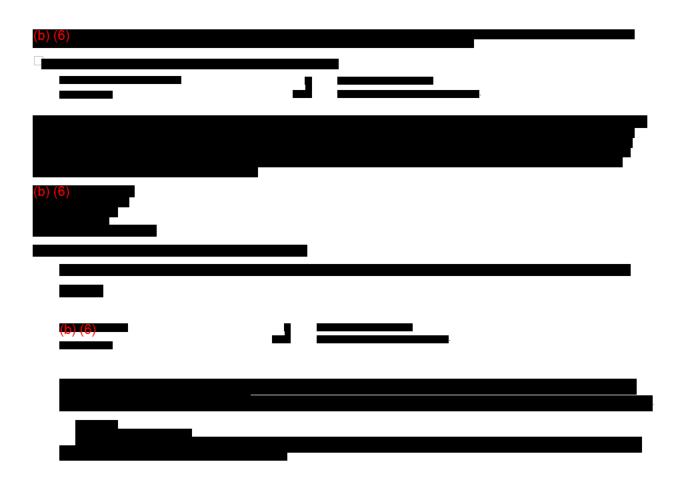
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COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

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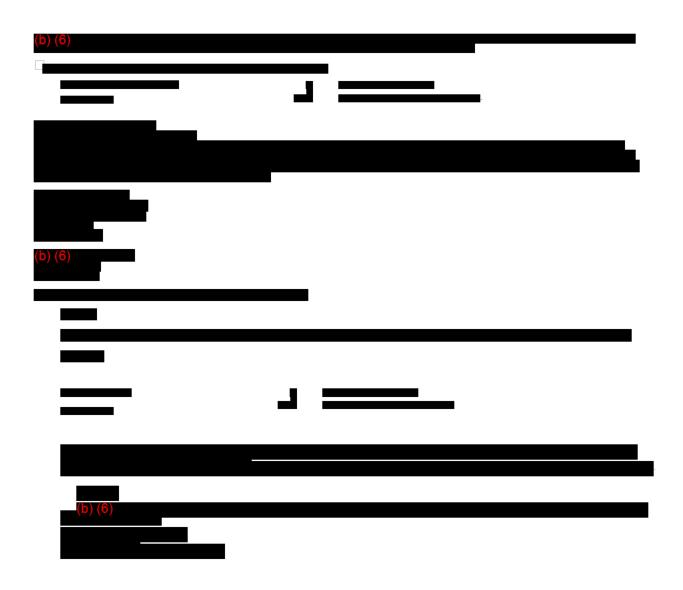
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(b) (6)

Air Traffic and Law Enforcement Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115



From:

To:

Cc:

Morion David (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Friday, September 26, 2014 5:20:00 PM
Attachments: COA Process Initial Itr Template.doc
Order 8900 1 Volume 16.docx

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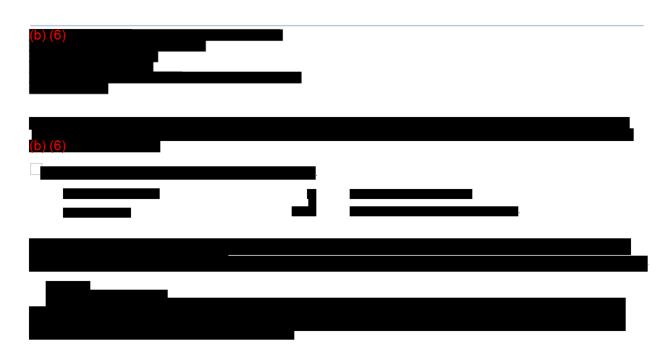
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Senior Avia ion Analyst
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Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tac ical Operations Section, AFS-85/AJV-115
(b) (6)



From: (b) (6)
To: (b) (6)

Cc: Morton, David (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Monday, September 29, 2014 8:55:00 AM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

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From:
To:
Cc: Morton David (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

 Date:
 Monday, September 29, 2014 9:12:00 AM

 Attachments:
 COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

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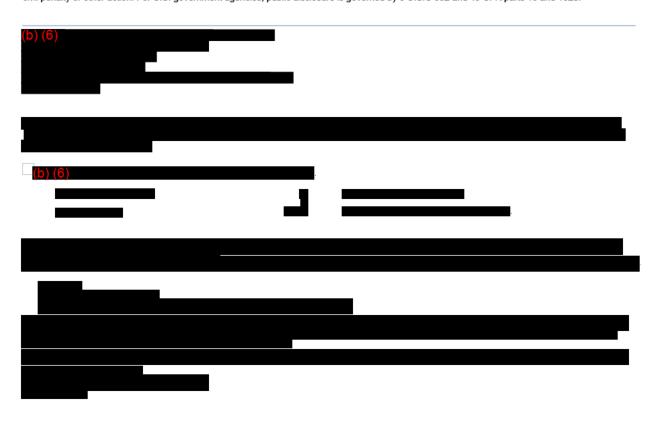
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Date: Monday, September 29, 2014 11:23 00 AM
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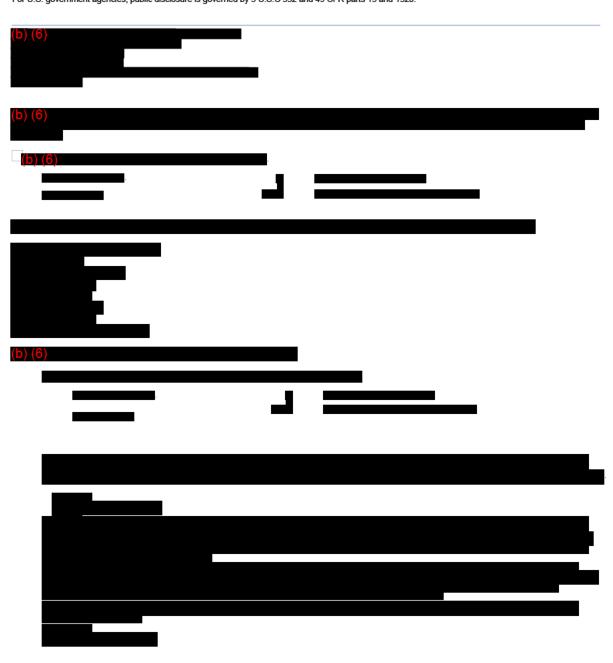
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Senior Aviation Analyst
Air Traffic and Law Enforcemen C Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)



From: (b) (6)

To: (b) (6)

Cc: Morton, David (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Thursday, October 02, 2014 10:19:00 AM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6)

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working for the Federal Aviation Administration Unmanned Aircraft

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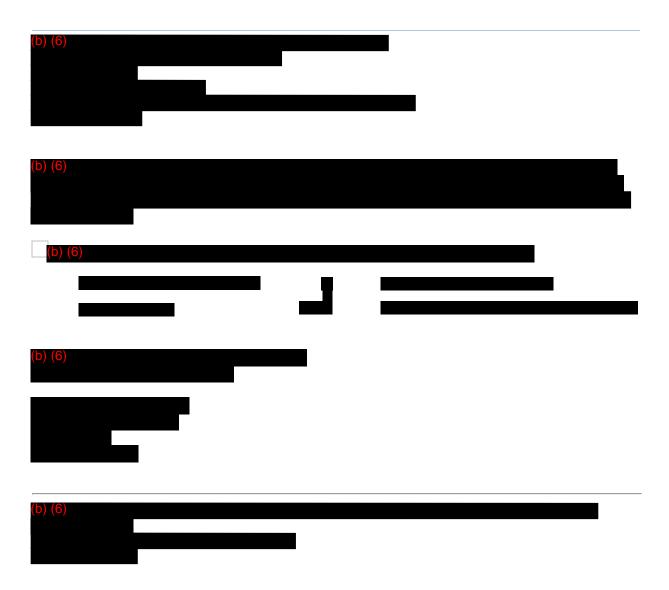
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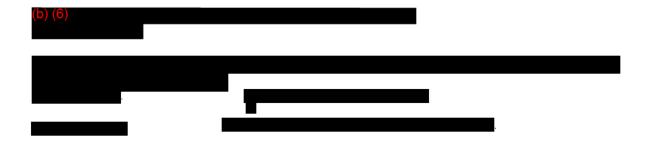
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(b) (6)
Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)







From:

To:

Cc:

Morton David (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

 Date:
 Monday, September 29, 2014 3:43:00 PM

 Attachments:
 COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.png

(b) (6)

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Lam a contractor with (b) (6).

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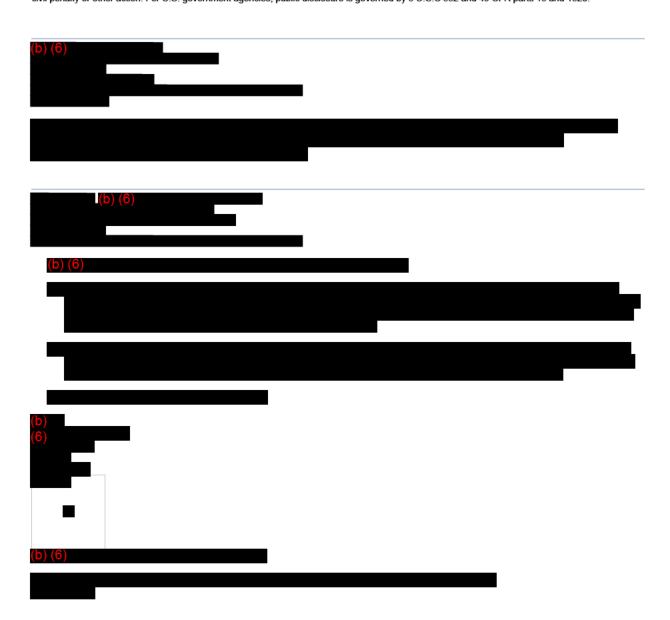
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Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tac ical Operations Section, AFS-85/AJV-115
(b) (6)



(b) (6)			
		_	
(b) (6)			

From:

To:

Cc:

Morton David (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Monday, September 29, 2014 11:14 00 AM

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

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The challenge with operating a small Unmanned Aircraft System (UAS) within the City of Hawthorne is that you are situated directly within the several airports including 2 NMs SE of the Los Angeles International Airport which is situated within Class B (Bravo) Airspace and the FAA in currently not approving sUAS operations within Class B airspace. Having said this here is the typical information provided to individuals interested in operating a sUAS.

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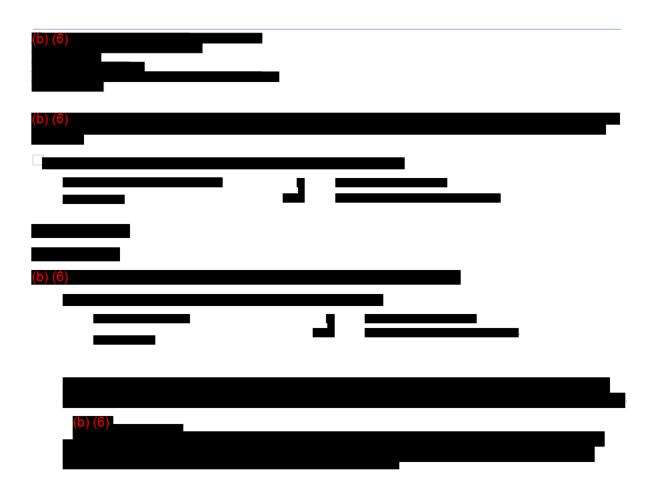
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Morton, David (FAA)

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Monday, September 29, 2014 8:11:00 AM
COA Process Initial Itr Template.doc
Order 9800.1 Volume 16.docx
Image001.gif
Image003.png
Image004.png Subject:

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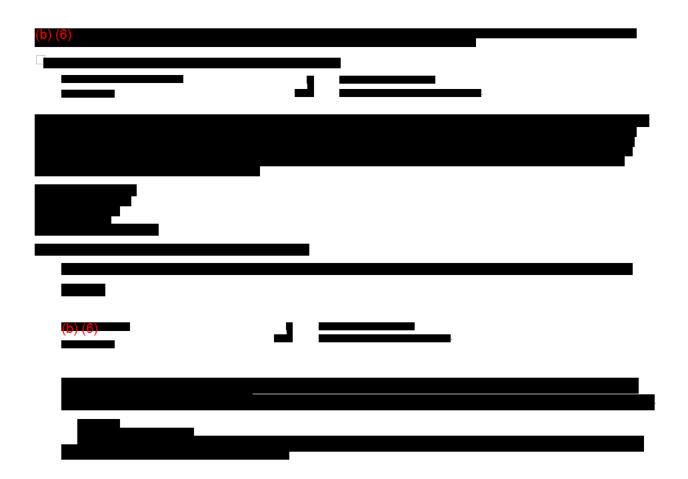
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Air Traffic and Law Enforcemen Liaison Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115



From:
To:
Cc:
Morton David (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

 Date:
 Monday, September 29, 2014 9:01:00 AM

 Attachments:
 COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6)

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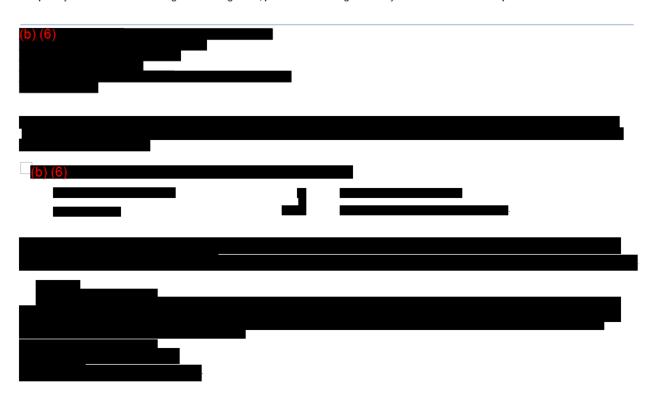
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o) (o) senior Avia ion Anaiyst Air Traffic and Law Enforcement (b) Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tac ical Operations Section, AFS-85/AJV-115



From:
To:
Cc: Morton David (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Monday, September 29, 2014 11:14 00 AM

Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

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The challenge with operating a small Unmanned Aircraft System (UAS) within the City of Hawthorne is that you are situated directly within the several airports including 2 NMs SE of the Los Angeles International Airport which is situated within Class B (Bravo) Airspace and the FAA in currently not approving sUAS operations within Class B airspace. Having said this here is the typical information provided to individuals interested in operating a sUAS.

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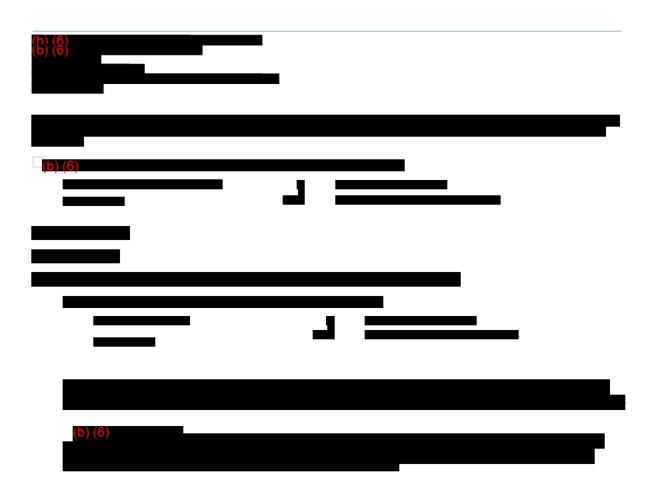
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Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)



From: (b) (6)
To: (b) (6)
Cc: Morton, David (FAA)

Subject: RE: quad copter questions

Date: Tuesday, September 30, 2014 3:06:00 PM

Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

(b) (6)

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working for the Federal Aviation Administration Unmanned Aircraft

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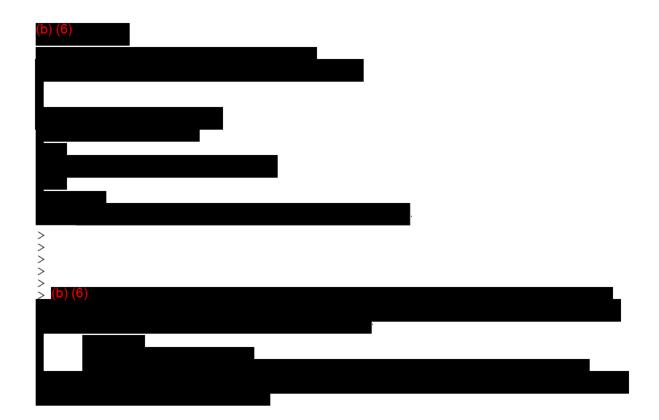
(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.







From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Morton, David (FAA)

Subject: FW: Ref: Account for submission of web-based COA

Date: Tuesday, November 04, 2014 1:33:00 PM

Attachments: pic18467.qif

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b)

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Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcemen (b) (6)
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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Dear FAA: We are interested in establishing an account in order to access the on line system and submit a COA to utilize a UAS under specific controlled circumstances. Can you please assist us in this process?

(b) (6), (b) (7)(C)

--

(b) (6), (b) (7)(C)

Trumbull-Ashtabula Group P.O. Box 189 Warren, Ohio 44482 (330) 675-7890 Office (b) (6), (b) (7)(C) From: To:

(b) (6), (b) (7) Morton, David (FAA) Cc:

Subject: RE: COA application process

Date: Thursday, October 16, 2014 9:24:00 AM Attachments: COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

b) (6), (b)

As a way of introduction, my name is (b) (6) . I am a contractor with working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

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Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Liaison
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Linearned Aircraft Systems Tactical Operations S

<u>Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115</u>

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Tuesday, October 14, 2014 7:35 PM

To: (b) (6), (b) (7)

Cc: (b) (6), (b) (7)(C) ; (b) (6)

Subject: RE: COA application process

Importance: High

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. Steve Pansky, who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Tuesday, October 14, 2014 1:56 PM

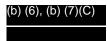
To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6), (b) (7)(C)

Subject: COA application process

Hello,

My name is (b) (6), (b) (7)(C) from the Ysleta Independent School District in El Paso, TX and I am inquiring in the process to apply for a COA. I oversee all security surveillance operations for the district's Security and Safety Dept. and we want to utilize a small under 4 lbs UAS to provide video for security related operations at our campuses. As you may well be aware the uses of these systems to aid Law Enforcement are extremely valuable and our district wants to stay ahead and enhance security and safety further at our campuses. My understanding is that we need to get login access from you to begin the application process. Could you assist the district in this process? I look forward to hear from you.



Thanks!

(b) (6), (b) (7)(C)

Ysleta Independent School District does not discriminate on the basis of race, color, national origin, religion, sex, disability, genetic information, or age in its programs, activities, or employment. El Distrito escolar de Ysleta no discrimina en base a raza, color, nacionalidad, religión, sexo, discapacidad, la información genética, y/o edad, en sus programas, actividades, o empleo.

 From:
 (b) (6)

 To:
 (b) (6), (b)

 Cc:
 Morton, David (FAA)

 Subject:
 RE: COA Application

Date: Monday, November 03, 2014 2:33:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

(b) (6), (b) (7)

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working for the Federal Aviation Administration Unmanned Aircraft

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Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
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From: Reyes-Garcia, Dina (FAA)

Sent: Monday, October 27, 2014 9:27 AM

To: (b) (6)

Cc: Pansky, Steven CTR (FAA) Subject: RE: COA Application

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From: (b) (6), (b) (7)(C)

Sent: Monday, October 27, 2014 11:45 AM

To: Reyes-Garcia, Dina (FAA) **Subject:** COA Application

Mrs. Garcia:

I am not sure if we need to apply for a COA or not, but as a rotorcraft pilot, I have found that it is best to err on the side of the hard road. We want to put into use a remotely controlled quadcopter manufactured for use by DJI. Can you point me in the right direction to get started in the COA process, assuming that I need a COA? I understand the limitations (400' AGL, air space considerations, etc), but I need to know what I do not know.

v/r, (b) (6

Anderson County Sheriff's Office 200 Bleckley Street Anderson, SC 29624

(b) (6)

(b) (6)

864-260-1055 Fax

From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: Morton, David (FAA)

Subject: RE: COA information for law enforcement
Date: Thursday, November 06, 2014 8:13:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

(b) (6), (b)

Mr. Morton asked if I would please respond to your question. As a way of introduction, my name is I am a contractor with (b) (6) working for the working for the working for the working for the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

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- · A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- · An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or County Attorney (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free

to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement/SAC-EC Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, November 04, 2014 01:05 AM

To: Morton, David (FAA)

Subject: COA information for law enforcement

Hello Mr. Morton,

I am (b) (6), (b) (7) with the Jacksonville Sheriff's Office in Florida. As a hobby, I am very involved in building custom multi-rotor RC aircraft. I have long seen the benefits these craft could bring to my department and have decided to take it upon myself to gather some information about how my department may procure clearance to utilize UAS/ UAV. I know the regulation on these platforms is very grey and under development so I hope you can clarify it for me in reference to use by Law Enforcement. I have been to the Mesa County SO page which had some very good information, however it may be out dated by now. Any information you can provide me would be of help as I am putting together a research packet and demonstration video to present to my department in hopes of sparking their interest or at least introducing this technology to them.

Thank you

From: (b) (6)
To: (b) (6).

Cc: Morton, David (FAA)

Subject: RE: COA Information Request

Date: Tuesday, October 14, 2014 10:17:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6), (b) (7)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law
enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned
Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the
National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety
Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law
Enforcement program resource manager, we handle Fire Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agency's City, County or State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the State Attorney General, County or City Attorney and their appropriate legal counsel.

STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to **training and**

evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
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- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates all of the agency's jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

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Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement/SAC-EC Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJR-36-UAS

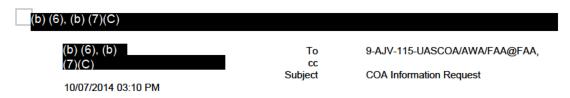
Sent: Tuesday, October 14, 2014 6:51 PM

To: (b) (6), (b) (7)

Cc: (b) (6)

Subject: Re: COA Information Request

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



To whom it may concern,

I work for a municipal police department. We are beginning the process of gathering information to use a small UA (hobbyist-type) in order to take aerial photographs above vehicle crash scenes. We are not expecting to exceed over 100 feet in altitude. At the present time, we climb a fire truck's aerial ladder in order to photograph the scene and it is a 100 foot ladder.

As a government agency employee, am I correct in my line of thinking that a COA must be obtained?

Thank you for any assistance,

(b) (6), (b) (7)(C)

Traffic Safety and Canine

Township of Spring Police Department 2800 Shillington Road Reading, PA 19608 (b) (6), (b) (7)(C) Fax # (610) 678-3637 (b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6).

Cc: (b) (6) ; Morton, David (FAA)

Subject: RE: COA on-line access

Date: Thursday, October 16, 2014 11:45:00 PM
Attachments: COA Process Initial Itr Template.doc
Order 8900 1 Volume 16.docx

(b) (6),

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement/SAC-EC Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, October 16, 2014 12:36 PM

To: (b) (6), (b)

Cc: (b) (6), (b) (7)(C)

Subject: RE: COA on-line access

Importance: High

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Thursday, October 16, 2014 2:49 PM

To: Reyes-Garcia, Dina (FAA)
Cc: (b) (6), (b) (7)(C)
Subject: COA on-line access

I am submitting this request for access to the site to apply for a FAA COA.

The agency in which I am requesting access for application: Rockdale County Sheriff's Office 911 Chambers Drive Conyers Ga. 30012.

The concept of operation and request intended for the submission of a FAA COA is for proper approval for the use of a UAS for Law Enforcement functions. These functions would include public safety emergencies and critical incidents. The UAS would be used in situations such as identifying the location of a fleeing felon for apprehension and safety aspects of law enforcement objectives during a foot pursuit involving perimeter containment and observation. Additionally the UAS would be used in an active shooter situation, school safety or emergency operations involving a school, SWAT situations involving potential hazards, barricaded subjects, and accident scene observations and documentation. The intended use of the UAS will not contradict any state laws in

which identify areas protected under fourth amendment, nor a search of any area without the prior approval from a judicial officer for a search warrant. The UAS will not be operated in a manner to exceed 400 feet nor will it be operated in any manner out of the direct line of sight of the operator in control of the UAS for the functions identified.

(b) (6), (b) (7)(C)

Rockdale County Sheriff's Office Special Operations Unit (b) (6), (b) (7) From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Morton, David (FAA)

Subject: RE: COA

Date: Thursday, October 16, 2014 11:49:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical

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Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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----Original Message-----

From: Reyes-Garcia, Dina (FAA)

Sent: Thursday, October 16, 2014 11:26 AM

To: (b) (6), (b) (7)(C) Cc: (b) (6), (b) (7)(C)

Subject: RE: COA Importance: High

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Thursday, October 16, 2014 11:40 AM

To: Reyes-Garcia, Dina (FAA)

Cc: (b) (6), Subject: COA

Greetings,

I work as (b) (6), (b) (7)(C) for Troy University. We have recently purchased a DJI Phantom Vision 2+. Our planned use of this aerial vehicle will be for search and rescue for lost students/civilians in our wooded area, as well as support for surrounding state and local police agencies during potential high risk search warrants, and or to monitor the actions of law enforcement officers. The areas of use would include Houston County AL, including Dothan, AL and all municipalities within the county of Houston. Dale County AL, to include Ozark, AL and all surrounding municipalities within the county of Dale.

This UAV will only be utilized during daytime hours as it is not equipped with night flying capabilities other than line of site and 2 green lights and 2 red lights that flash. Our maximum altitude is 986ft, however the normal operating height would not exceed 250ft. The maximum safe operating distance is approximately 1800'. However we will not exceed a distance of more than 1000'.

The UAV is equipped with a fail safe "return to home" feature that is used if the connection or ability to control the UAV is lost.

If you have any additional questions please do not hesitate. I look forward to hearing from you regarding the process to obtain a FAA COA.

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6)
Cc: Morton, David (FAA)

Subject: RE: COA Application

Date: Tuesday, October 28

Date: Tuesday, October 28, 2014 11:09:00 AM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

b) (6)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all

law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing

Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to

operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton,

an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office

(UASIO) National Law Enforcement program resource manager, we handle Emergency First

Responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, First Responder Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application

program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the County or State Attorney General and their appropriate legal counsel.

STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- 1. An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- 3. A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual First Responder missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates all of the agency's jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or County Attorney's office (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA Online application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement/SAC-EC Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115



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From: Reyes-Garcia, Dina (FAA)

Sent: Monday, October 27, 2014 9:27 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA Application

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Monday, October 27, 2014 11:45 AM

To: Reyes-Garcia, Dina (FAA) Subject: COA Application

Mrs. Garcia:

I am not sure if we need to apply for a COA or not, but as a rotorcraft pilot, I have found that it is best to err on the side of the hard road. We want to put into use a remotely controlled quadcopter manufactured for use by DJI. Can you point me in the right direction to get started in the COA process, assuming that I need a COA? I understand the limitations (400' AGL, air space considerations, etc), but I need to know what I do not know.

v/r, (b) (6), (b)

Anderson County Sheriff's Office 200 Bleckley Street Anderson, SC 29624

(b) (6), (b) (7)(C)

864-260-1055 Fax

From: (b) (6)

To: (b) (6), (b) (7)

Cc: Morton, David (FAA)

Subject: RE: Jacksonville Beach Police Request
Date: Thursday, October 23, 2014 4:11:00 PM

Attachments: <u>image001.jpg</u>

ac91-57.pdf

COA Process Initial Itr Template.doc FAA Order 8130 34C.pdf Order 8900 1 Volume 16.docx

(b) (6), (b) (7)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned

Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator
for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in
implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the
FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr.
David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems
Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire
Agency UAS requests.

So there is actually 4 ways a UAS can operate legally within the NAS.

- 1. If the UAS is operating for recreational use, the pilot can operate under advisory Circular 91-57 that speaks to the use of recreational/hobbyist type operations (See attachment).
- 2. For Manufactures, a Special Airworthiness Certificate-Experimental Category is processed which allows the applicant to conduct UAS operations for research and development, pilot training and market Survey (see Order 8130.34C).
- 3. Under what is referred to as a 333 exemption, the applicant is requesting an exemption to fly for commercial purposes. Please take a look at web site (http://www.faa.gov/uas/legislative_programs/section_333/) that speaks to this process.
- 4. If the proponent is a recognized Federal, State, County or City Public Agency, they can operate under a Certificate of Waiver/Authorization (COA). Under this approval, the proponent operates as a public aircraft operator (Title 49 USC 40102A(41)(c)) however they cannot operate for commercial purposes which would be in violation of Title 49 USC 40125b which speaks to commercial use of UAS by public agencies (See attachment 8900.1). I would suspect ACD Telecom asked that you request the COA since they cannot qualify under this process.

The FAA is also in the process of establishing a new small UAS Rulemaking that would allow for the use of UAS for commercial purposes however I do not have visibility on this program so I am not aware of what the requirements will be to operate or the timeframe for the release of this approval.

So, the Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from your agency's State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that you CANNOT Self-Certify your agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the State Attorney General, County or city attorney and their appropriate legal counsel.

If the public agency is ultimately planning on deploying a sUAS for operational missions the FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- 1. An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- 3. A lost communication procedures document that describes what action(s) the Pilot-in-

Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).

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Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City attorney (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA Online application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, October 22, 2014 3:44 PM

To: (b) (6), (b) (7)(C)
Cc: (b) (6)

Subject: RE: Jacksonville Beach Police Request

Importance: High

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Wednesday, October 22, 2014 12:42 PM

To: Reyes-Garcia, Dina (FAA) Cc: Reyes-Garcia, Dina (FAA)

Subject: Jacksonville Beach Police Request

Attached please find a request for a FAA permit for a flight demo with ACD Telecom. Thank You,

(b) (6), (b) (7)(C)

Jacksonville Beach Police Department 101 S. Penman Road Jacksonville Beach, Fl. 32250

(b) (6), (b) (7)(C)

904-247-6343 (fax)



From: (b) (6)

To: (b) (6), "

Cc: Morton, David (FAA)

Subject: RE: Law Enforcement Agency COA Application
Date: Monday, November 03, 2014 4:26:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

(b) (6),

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

This is the information I typically send out to law enforcement/fire and first responder agencies wishing to operate a sUAS in the NAS. Unlike the typical COA that is approved for a public agency that wishes to operate at a specific location, the public safety agency has a need to rapidly respond to a location that has not been pre-coordinated though the FAA's COA on line application process. With that understanding the FAA first wants to ensure that the proponent can operate the UAS safely in a location that is deemed safe under a training COA and then coordinate for the approval of a Jurisdictional COA that gives the proponent greater flexibility in responding when an incident arises that needs a rapid deployment of this tool. The information below will speak in greater detail to the two passed approach to this approval.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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THE FIRST STEP.

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STEP TWO.

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STEP THREE.

-

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates all of the agency's jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

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standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures

- · A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
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Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement/SAC-EC Liaison
Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Thursday, October 30, 2014 11:54 AM

To: (b) (6)

Subject: Law Enforcement Agency COA Application

Good Afternoon (b) (6)

I am (b) (6). (b) with the City of Philadelphia Law Department. I understand that the process for a Law Enforcement Agency to obtain a Certificate of Authorization for UAS operations is a little different than the normal COA application process. I was wondering if you could provide me with a little more information and the respective requirements? The City of Philadelphia is currently analyzing potential uses for UASs in the realm of public safety.

Thank you,



City of Philadelphia Law Department Philadelphia International Airport Executive Offices, Terminals D-E, 3rd floor Philadelphia, PA 19153

(b) (6), (b) (7)(C)

THIS MESSAGE CONTAINS INFORMATION THAT MAY BE ATTORNEY WORK PRODUCT, PROTECTED BY ATTORNEY-CLIENT PRIVILEGE, OR EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF YOU HAVE RECEIVED THIS MESSAGE IN ERROR, PLEASE ADVISE THE SENDER BY REPLY EMAIL AND DELETE THE MESSAGE.

This message is intended only for certain recipients and may be privileged or confidential. If you have received it in error, please notify sender and delete it without making or retaining a copy. Consider the environment! Please print this email only if absolutely necessary ##PhlGwavaMsgHash-3756832##

From:
To:
Cc:
Morton David (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

 Date:
 Saturday, October 25, 2014 10:02:00 AM

 Attachments:
 COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png image005.jpg

(b) (6)

As a way of introduction, my name is (6) (6) . I am a contractor with (5) (6) . Working for the Federal Aviation Administra ion Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

Based on your response to the questions about your ConOps it appears you have been doing your homework on what is needed to apply for a COA so please excuse the information that I am about to give you since it will probably be a repeat of the information you may already have.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the Na ional Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Informa ion Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordina ion among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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STEP THREE.

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- A review of the agency's UAS training and proficiency program, to include all training records
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emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mi igation procedures

- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes he COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand hat the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

Senior Avia ion Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administ

Unmanned Aircraft Systems Tac ical Operations Section, AFS-85/AJV-115

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJR-36-UAS

Sent: Friday, October 24, 2014 10:36 AM

To: (b) (6), (b)

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa gov/uas) to learn more on COAs and he COA process.

(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

9-AJV-115-UASCOA/AWA/FAA@FAA, То

10/24/2014 12:57 PM

RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Good afternoon,

- 1. The public agency requesting an access sign on to be able to apply for the COA is the City of Elgin Police Department, a certified municipal law enforcement agency in the State of Illinois
- 2. The UAS platforms we are looking to train with, if a COA is authorized, will be a quad rotor system similar to the Dragon Flyer X4ES; the AeroVironment Qube; or the SkyRanger or Scout by Aeryon. Prior to filling out and filing for a COA, the Elgin Police Department will select and register said platform with a "N" tail number and the department will follow the guidelines set for in the COA process.
- The concept of operation would be to conduct training, research/development in class G airspace in a designated and pre-approved area after a FAA COA is issued

Please let me know if further information is required at this time.

Regards,

Dan

(b) (6), (b) (7)(C)

151 Douglas Avenue Elgin, IL 60120



From: Dina.Reyes-Garcia@faa.gov [mailto:Dina.Reyes-Garcia@faa.gov] On Behalf Of 9-AJV-115-UASCOA@faa.gov

Sent: Monday, September 15, 2014 5:49 PM

To: (b) (6), (b)
Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Importance: High

Please provide more information: (1) the public agency that is requesting the COA (2) a small description of the UAS and (3) concept of operation.

Thank you. (b) (6), (b) (7)

09/03/2014 11:01 AM

To9-AJV-115-UASCOA/AWA/FAA@FAA, cc SubjectMessage from <u>www.faa.gov</u>: <u>9-AJR-36-UAS@faa.gov</u>

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/about/office org/headquarters offices/ato/service units/systemops/aaim/organizations/uas/coa/

Message:

The Elgin Police Department, Elgin, Illinois, is considering filing for a COA for UAS testing and evaluation. I am requesting an access sign on for the COA application website. Please let me know what steps I need to begin this process.

(b) (6), (b) (7)(C) (b) (6), (b)

This message, including any attachments, is the property of the City of Elgin. It may be legally privileged and/or confidential and is intended only for the use of the intended recipient(s). No recipient should forward, print, copy, or otherwise reproduce this message in any manner that would allow it to be viewed by any individual not originally listed as a recipient. If the reader of this message is not the intended recipient, you are hereby notified that any unauthorized disclosure, dissemination, distribution, copying or the taking of any action in reliance on the information herein is strictly prohibited. If you have received this communication in error, please immediately notify the sender and delete this message.

Due to the nature of the Internet, the sender is unable to ensure the integrity of this message and does not accept any liability or responsibility for any errors or omissions (whether as the result of this message having been intercepted or otherwise) in the contents of this message.

Any views expressed in this communication are those of the individual sender, except where the sender specifically states them to be the views of the city.

From:

To:

Cc:

Mordon David (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

 Date:
 Tuesday, October 14, 2014 10:25:00 PM

 Attachments:
 COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6),

As a way of introduction, my name is Steve Pansky. I am a contractor with Science Applications International Corporation (SAIC) working for the Federal Aviation Administra ion Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the Na ional Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Informa ion Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordina ion among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airwor hiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all
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- \cdot $\:$ A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mi igation procedures
- · A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
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The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand hat the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Morton or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6) Senior Avia ion Analyst

Air Traffic and Law Enforcement/SAC-EC Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tac ical Operations Section, AFS-85/AJV-115



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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJR-36-UAS

Sent: Tuesday, October 14, 2014 7:16 PM

To: (b) (6)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

9-AJR-36-UAS/AWA/FAA Sent by: Dina Reyes-Garcia

10/14/2014 10:15 PM

To (b) (6), (b) (7)

Subject Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.govLink

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and he COA process.

(b) (6), (b) (7)

To 9-AJV-115-UASCOA/AWA/FAA@FAA,

10/14/2014 06:46 PM

Subject Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

I am interested in obtaining a COA for use with police tactical operations. We are a large regional SWAT team in Washington State and the UAS we are interested falls in the Hooby Aircraft range. However, we would like to use it for active incidents where lives are at risk, and for scouting locations where we have a search warrant. All of our use will be below 400 feet and the aircraft will be visible and under control of a police officer at all times. Please let me know what I need to do. Thank you.

(b) (6), (b) (7)(C) / Valley SWAT

From: (b) (6)
To: (b) (6),

Cc: Morton, David (FAA)

Subject: RE: Request for COA On-line access to apply for a COA - Bergen County Prosecutor"s Office, New Jersey

Date: Monday, November 03, 2014 2:27:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

image001.gif image002.jpg

(b) (6), (b)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Monday, October 27, 2014 8:01 AM

To: (b) (6), (b)

Cc: (b) (6)

Subject: RE: Request for COA On-line access to apply for a COA - Bergen County Prosecutor's Office,

New Jersey

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Thursday, October 23, 2014 2:17 PM

To: Reyes-Garcia, Dina (FAA)

Subject: Request for COA On-line access to apply for a COA - Bergen County Prosecutor's Office, New

Jersey

Ms. Reyes,

The Bergen County Prosecutor's Office Intelligence & Counter-Terrorism Unit, is requesting on-line access to apply for a COA for our agency.

Concept of Operation:

The Bergen County Prosecutor's Office Intelligence & Counter-Terrorism Unit is exploring a project requiring the purchase and use of a small Unmanned Aerial Vehicle (UAV), as part of the Homeland Security mission.

The small UAV would be a platform to support a digital camera to collect aerial photographs, and video imagery capturing potential vulnerabilities at critical infrastructure, and key resource sites in Bergen County, New Jersey.

The imagery that is captured would be incorporated into Security Assessment documentation, and would also be utilized in our emergency response preparedness

efforts.

Our unit will likely purchase the DJI Phantom 2 Vision +, which is a ready to fly (RTF) unit, requiring one operator. The unit weighs less than 4 pounds with the battery attached. It is also equipped with safety features, including Radar Positioning, and a Return Home feature that will return home, in the event that the unit exceeds the control range of the remote control. The unit also has a "no fly zone" feature, which restrict flying distances and elevations within most airports, and a 394 feet height restriction when flying the unit without a GPS signal.

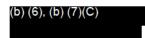
All intended UAV flights conducted as part of our mission, will be conducted in accordance with guidelines required by the FAA, and our unit will document flights by recording the purpose, duration, location, and a statement of facts establishing the purpose for which the UAV is used.

Respectfully,

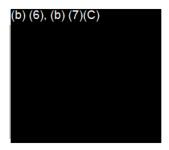
(b) (6), (b) (7)(C)

Intelligence & Counter-Terrorism Unit

Bergen County Prosecutor's Office 100 Eisenhower Drive Paramus, NJ 07652



201-712-4656 (Fax)



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From: (b) (6)
To: (b) (6),

Cc: Morton, David (FAA)
Subject: RE: UAS License

Date: Tuesday, October 28, 2014 10:48:00 AM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

(b) (6), (b)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical

Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agency's City, County or State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the State Attorney General, County or City Attorney and their appropriate legal counsel.

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training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- 1. An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates all of the agency's jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

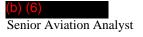
- · A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

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Respectfully,



Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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----Original Message-----

From: Reyes-Garcia, Dina (FAA)

Sent: Monday, October 27, 2014 8:01 AM

 $T_{O:}$ (b) (6), (b)

Cc: (b) (6)

Subject: RE: UAS License

Thank you. Your email has been forwarded to our Law Enforcement liaison, (b) (6) , who will continue to assist you. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Thursday, October 23, 2014 1:51 PM

To: Reyes-Garcia, Dina (FAA)

Subject: UAS License

Our department will be purchasing a UAS drone. Can you advise what is needed to get certification to operate it. Thank You

(b) (6), (b) (7)(C)

Canton Police Department

(b) (6), (b) (7)

From: (b) (6).
To: (b) (6).

Cc: Morton, David (FAA)
Subject: RE: UAS License

Date: Monday, November 03, 2014 2:07:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

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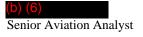
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(b) (6), (b) (7)(C)

Canton Police Department

(b) (6), (b) (7)

From: (b) (6) To: (b) (6), (b)

Cc: Acevedo, Peter K (FAA); Morton, David (FAA)

Subject: RE: UAS question

Date: Thursday, November 06, 2014 8:52:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

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Here is the typical information I provide to law enforcement agencies requesting information on operating a small unmanned aircraft system in the national airspace system.

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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement/(b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (b)

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From: Acevedo, Peter K (FAA)

Sent: Thursday, November 06, 2014 11:45 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: UAS question



Here is (b) (6) email.

Contact him and he will get you started
With the COA process . Call if you need anything.

Thanks

Pete

Peter Acevedo
Air Space Specialist
Operations Support,
Eastern Service Center
Desk: 404-305-5598
Fax; 404-305-5572

HONOR - describes an attitude of respect that is reflected in actions

Only two defining forces have ever offered to die for you: Jesus Christ and a Soldier

From: (b) (6), (b) (7)(C)

Sent: Wednesday, October 29, 2014 4:31 PM

To: Acevedo, Peter K (FAA) **Subject:** UAS question

By chance were you at the roundtable for UAS/UAV issues held at the Polk County Sheriffs Office in April? If so, we met there, and I would like to schedule a quick phone conversation if you have time. Thanks!

(b) (6), (b) (7)(C)

Orlando Police Department Drug Enforcement Division

(b) (6), (b) (7)(C)

Florida has a very broad public records law. As a result, any written communication created or received by the City of Orlando officials and employees will be made available to the public and media, upon request, unless otherwise exempt. Under Florida law, email addresses are public records.

If you do not want your email address released in response to a public records request, do not send electronic mail to this office. Instead, contact our office by phone or in writing.

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: FW: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Monday, November 17, 2014 11:50:00 AM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

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John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems
Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS
requests.

To answer your question, no. The FAA does not allow small Unmanned Aircraft to fly around chasing fleeing suspects. The approval for the operation of unmanned aircraft is highly regulated to ensure safety of flight. Visual line of sight is a requirement and the use of a chase vehicle or "daisy Chaining" of observers is not approved. I have attached the typical information we provide to inquiries into the operation of UAS by public agencies.

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Respectfully,

(D) (D)

Senior Aviation Analyst

Air Traffic and Law Enforcement/SAC-EC Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115



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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJR-36-UAS

Sent: Monday, November 17, 2014 8:39 AM

To: (b) (6)

Cc: Reyes-Garcia, Dina (FAA)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Hi (b) (6)

Do you have any documentation or a site with LE information?

d/

(b) (6), (b) (7)(C)

To 9-AJV-115-UASCOA/AWA/FAA@FAA,

CC

11/12/2014 02:42 PM

Subject Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

I was inquiring about what is needed to legally fly a uav in city limitis for the purpose of catching a fleeing suspect? Any help would be great. Thanks

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)
Subject: FW: UAS for LEOs

Date: Friday, November 21, 2014 2:01:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

Officer Harry,

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned

Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator
for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in
implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the
FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr.
John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems
Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS
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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement/SAC-EC Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115



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From: Jackson, Jacqueline R (FAA)

Sent: Friday, November 21, 2014 10:52 AM

To: (b) (6)

Subject: FW: UAS for LEOs

Please contact Officer Harry.

Thanks

Jackie

Jacqueline R Jackson Manager, Tactical Operations Section Mission Support Services (AJV-115)/Flight Standards (AFS-85) (0) 202-267-8177 (b) (6)

email: jacqueline.r.jackson@faa.gov

From: Might, Carol (FAA)

Sent: Friday, November 21, 2014 8:11 AM

To: Jackson, Jacqueline R (FAA)

Cc: (b) (6), (b) (7)(C)

Subject: UAS for LEOs

Jacqueline

Can you provide any information on whether COAs are being issued for Law Enforcement in Connecticut?

Good Morning,

I am looking for any information that may be available in regards to the use of UAS for Law Enforcement. I am a (b) (6), (b) (7) with the Trumbull Police Department in Connecticut and there has been discussion on the applicable uses of small lightweight UAS for police related matters. If there is any guidance that you can offer it would be greatly appreciated. Thank you.

(b) (6), (b) (7)(C)

Trumbull Police Department
(b) (6), (b) (7)(C)

Carol Might
FAA, System Operations, Security
Special Operations Group

Office 202 267 8025

(b) (6)

From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA)

Subject: RE: COA Application: Jefferson County New York Sheriff"s Office

Date: Monday, December 01, 2014 3:17:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As a more formal introduction, my name is (b) (6)

working for the Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO)

coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in
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John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems
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(b) (b)

Senior Aviation Analyst

Air Traffic and Law Enforcement/SAC-EC Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

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From: (b) (6), (b) (7)(C)

Sent: Monday, December 01, 2014 11:15 AM

To: (b) (6)

Subject: COA Application: Jefferson County New York Sheriff's Office

Hi (b) (6)

This is (b) (6), (b) (7)(C) from the Jefferson County (NY) Sheriff's Office. I just spoke with you on the phone. We are interested in applying for a COA. (I haven't had any luck accessing the online COA form on the FAA website.) Any links, forms, or information you can give us would be greatly appreciated.

Thanks--

(b) (6), (b) (7)(C)

Personal Cell: (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

Jefferson County Sheriff's Office 753 Waterman Drive Watertown, NY13656 (b) (6), (b) (7)(C) From: (b) (6) (c) (b) (7)(C)

Cc: Steventon, John (FAA)

Subject: RE: Lynnwood PD COA

Date: Tuesday, December 09, 2014 7:10:00 PM
Attachments: COA Process Initial Itr Template.doc
Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As a way of introduction, my name is working for the Federal Aviation Administration Unmanned
Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator
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(b) (6)

Senior Aviation Analyst
Science Applications International Corporation (SAIC) supporting
Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115



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From: (b) (6)

Sent: Tuesday, December 09, 2014 4:00 PM

(b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: Lynnwood PD COA

(b) (6), (b) (7)

Thanks you for your call. Law enforcement COA applications are initially handled by (b) (6)

(b) (6)

He will be an excellent place to begin your process for obtaining a law enforcement COA. I am attaching the DOJ bulletin which provides information for you planned UAS activities.

Please feel free to contact me or Byron Chew at any time with UAS questions

Thanks,

(b) (6)

Unmanned Aircraft Systems
Air Traffic Control Specialist
Operations Support Group AJV-W23
Lockheed Martin (NISC III)

(b) (6)

Email: (b) (6)

From: (b) (6), (b) (7)(C)

Sent: Tuesday, December 09, 2014 3:50 PM

To: (b) (6)
Subject: Lynnwood PD COA

(b) (6), (b) (7) (C)

Thanks for your time and all the information you provided today. You of course have my email address now. I'd be happy to get any information you might be able to provide about the COA process and requirements.

Thanks again, (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

Lynnwood Police Department 19321 44th Avenue West Lynnwood, WA 98036-5008

Email: (b) (6), (b) (7)(C)

(o) (b) (6), (b) (7)

From: To: Cc:

Attachments:

(b) (6), (b) (7)(C)

Cc: Steventon_John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Monday, November 17, 2014 11:39:00 AM COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx image001.gif image003.png

(b) (6), (b) (7)

As a way of introduction, my name is (b) (6) I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agency's County or State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the State Attorney General or County Attorney and their appropriate legal counsel.

STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- 1. An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates all of the agency's jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency

procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures

- . A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- · An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program. The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or County Attorney (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst

Air Traffic and Law Enforcement/SAC-EC Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115



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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJR-36-UAS t: Monday November 1 (b) (6), (b) (7)(C) (b) (6) biect: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa gov

, who will continue to assist you with the COA process. Please be Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) advised that your email will be responded to in the order it was received. You may also also visit our website (<u>www.faa.gov/uas</u>) to learn more on COAs and the COA process

(b) (6), (b) (7)(C) (b) (6), (b) (7)(C) 9-AJV-115-UASCOA/AWA/FAA@FAA. essage from www.faa.gov: 9-AJR-36-UAS@faa.g 11/11/2014 09:01 PM

1) Cambria County Special Emergency Response Team 401 Washington St. Johnstown, PA 15901

- 2) Small radio controlled quadchopper equipped with a GoPro video camera
- 3) To be used for aerial surveillance and to collect information on critical incidents

On 11/7/2014 7:50 AM, 9-AJV-115-UASCOA@faa.gov wrote:

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

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9-AJV-115-UASCOA/AWA/FAA@FAA
(b) (6), (b)
                                                                 Message from www.faa.gov: 9-AJR-36-UAS@faa.gov
11/05/2014 11:02 AM
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This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

I need to obtain a COA for my County's SWAT team UAV. How do I create an account in order to go to the online services?

From: (b) (6) To: (b) (6), (b) (7)(C) Cc: Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Friday, November 21, 2014 3:30:00 PM
Attachments: COA Process Initial Itr Template.doc
Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As a way of introduction, my name is (b) (6)

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for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in
implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the
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(b) (6)

Senior Aviation Analyst

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From: (b) (6), (b) (7)(C)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov Good morning (b) (6) I look forward to speaking with you. Have a great day. (b) (6), (b) (7)(C) | Palisades Interstate Parkway Police Dept. P.O. Box 155, Alpine NJ 07620 (b) (6), (b) (7)(C) Email: www.ParkwayPolice.org | Twitter: @ParkwayPolice From: Dina.Reves-Garcia@faa.gov [mailto:Dina.Reves-Garcia@faa.gov] On Behalf Of 9-AJV-115-UASCOA@faa.gov Sent: Thursday, November 20, 2014 11:28 AM To: (b) (6), (b) (7)(C) Cc: (b) (6) Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. (b) (6) continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process. (b) (6), (b) (7)(C) To 9-AJV-115-UASCOA/AWA/FAA@FAA, 11/20/2014 10:56 AM Subject Message from www.faa.gov: 9-AJR-36-UAS@faa.gov This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public operations/ Message: Good morning, I am the (b) (6), (b) (7)(C) for the Palisades Interstate Parkway Police Departmen Headquarters. I would like to speak with someone regarding UAS regulations and any potential application process. We are looking to deploy a "drone" for search and rescue operations on our property. I can be reached at (b) (6), (b) (7)(C)or by E-mail @ (b)(6), (b)(7)(C)Thank you. (b) (6), (b) (7)(C)

Sent: Thursday, November 20, 2014 8:29 AM

To: 9-AJV-115-UASCOA

Cc: (b) (6)

considered Unclassified For Law Enforcement Use Only unless specified otherwise. You do not have permission to disseminate to anyone other than the intended recipient without the explicit permission of the sender.

From: (h) (h) (h)

To: (b) (b) (b) (c) (c)

Cc: Steventon John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Wednesday, November 19, 2014 8:20:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx image001.gif image003.png

image003.png image004.png image005.jpg

(b) (6), (b) (7)(C)

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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement/SAC-EC Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section. AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJR-36-UAS

Sent: Tuesday, November 18, 2014 6:06 AM

Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

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(b) (6), ---11/17/2014 02:11:52 PM---(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

To 9-AJV-115-UASCOA/AWA/FAA@FAA

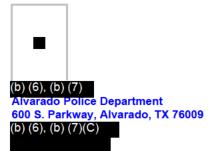
11/17/2014 02:11 PM

St

RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

- 1) Alvarado Police Department
- 2) Draganfly X4-P Quadcopter with thermal and regular camera. (Width 34.2" Length 34.25" Top Diameter 42" Height 12")
- 3) Very simplified, Our concept of the operation is to utilize this tool in Search and Rescue type operations, documenting of accident scenes, assist in

managing manpower / positioning during emergency calls (structure fires, hazmat responses, tactical responses), and documenting aerial footage of our cities infrastructure for advertising (parks, lake, etc...). This would be utilized by our department and could be called upon by surrounding entities for emergency assistance.



CONFIDENTIAL NOTICE: This electronic transmission and any documents or other writings sent with it constitute confidential information which is intended only for the named recipient and which may be legally privileged. If you have received this communication in error, do not read it. Please reply to the sender at the Alvarado Police Department, that you have received the message in error. Then delete it. Any disclosure, copying distribution or the taking of any action concerning the contents of this communication or any attachment(s) by anyone other than the named recipient is strictly prohibited.

From: Dina.Reyes-Garcia@faa.gov [mailto:Dina.Reyes-Garcia@faa.gov] On Behalf Of 9-AJV-115-UASCOA@faa.gov

Sent: Monday, November 17, 2014 10:37 AM To: (b) (6), (b) (7)(C)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Please provide the following information: (1) public agency reques ing he COA (2) small descrip ion of the UAS and (3) concept of operation.

To9-AJV-115-UASCOA/AWA/FAA@FAA, (b) (6), (b) (7)(C)

SubjectMessage from www.faa.qov: 9-AJR-36-UAS@faa.qov

11/12/2014 01:12 PM

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message: Need an account setup to file a COA. From: (b) (6) To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Friday, November 21, 2014 3:27:00 PM
Attachments: COA Process Initial Itr Template.doc
Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6), (b) (7)(C)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned

Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator
for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in
implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the
FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr.
David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems
Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire
Agency UAS requests.

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When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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- A review of the agency's UAS training and proficiency program, to include all training records
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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney's office (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement/SAC-EC Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJR-36-UAS

Sent: Thursday, November 20, 2014 8:20 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in

the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

(b) (6), (b) (7)(C) To 9-AJV-115-UASCOA/AWA/FAA@FAA, cc 11/18/2014 04:24 PM Subject Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

Our office is exploring the purchase of a Lockheed Martin Indago Quadrotor or similarly capable unmanned system for wildland firefighting, wilderness search and rescue, and law enforcement details. Is the Certificate of Authorization/Waiver specific to a certain make and model of unmanned aircraft? I'm uncertain if we would need to acquire the equipment first or secure the authorization first. Secondly, what is the process for creating an accout to gain access to the application?

(b) (6), (b) (7)(C)

NYS Forest Rangers

From: (b) (6)

To: (b) (6)

Cc: Steventon, John (FAA)

Cc: <u>Steventon, John (FAA)</u>

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Monday, November 24, 2014 12:59:00 PM

Attachments: <u>image001.gif</u>

image003.png image004.png

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned

Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator
for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in
implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the
FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr.
David Morton, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems
Integration Office (UASIO) National Law Enforcement program resource manager, we handle Fire
Agency UAS requests.

To answer your question, Under typical operations the Pilot in command (PIC) only needs to have completed the Private pilot ground school and passed the written exam however a private pilot license may be required depending on where the UAS operation takes place, the altitude the UAS operates at or the time of day. See FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16, chapter 4, Section 16-4-1-3 (Attached). The rest of your question regarding approval to operate a UAS in the National Airspace System resides in the information I have provided below.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Fire Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Fire management missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates all of the agency's jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes the COA process and an example of the application.

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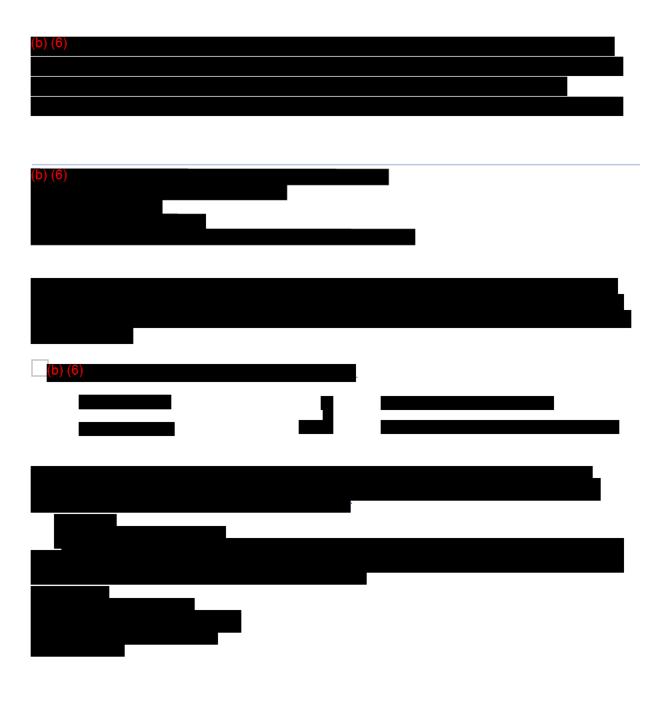
Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement/SAC-EC Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)



From: (b) (6) To: (b) (6)

Cc: Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Wednesday, December 03, 2014 7:11:00 PM

Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6)

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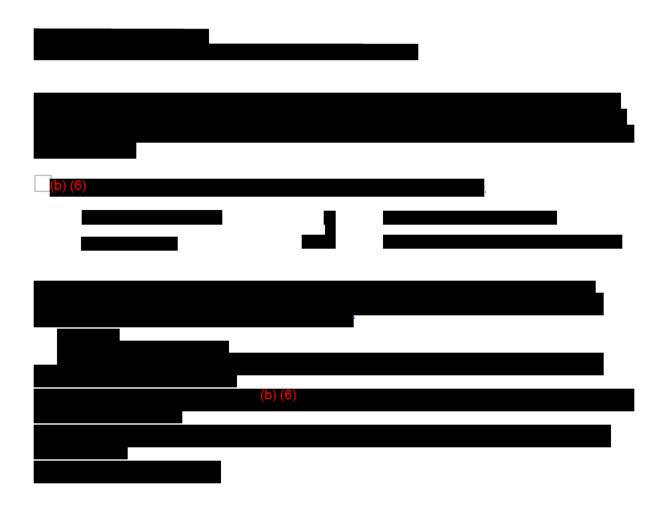
(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement/SAC-EC Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115



WARNING: This correspondence may contain Sensitive Security Information and attachments that are controlled under 49 CFR 15 and 1520. No part of this correspondence may be disclosed to persons without a "need to know", as defined in CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C 552 and 49 CFR parts 15 and 1520.



From: (b) (6)
To: (b) (6)
Cc: Steventon, John (FAA)
Subject: RE: online COA access

Date: Wednesday, December 03, 2014 7:12:00 PM

Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

(b) (6)

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emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures

- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or County Attorney (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (b)

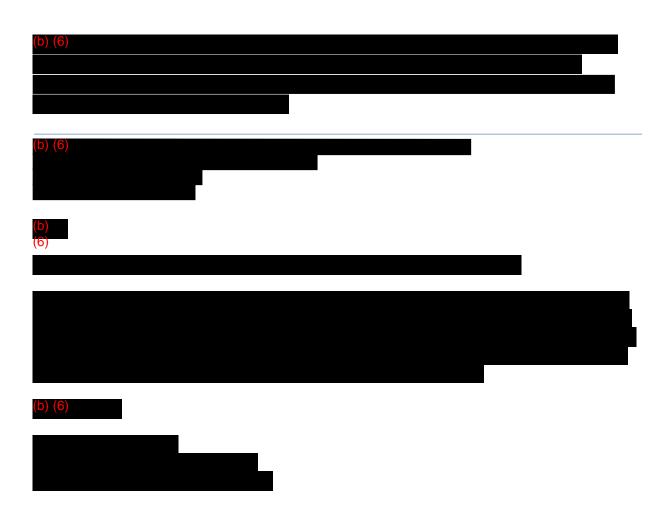
Senior Aviation Analyst

Air Traffic and Law Enforcement/SAC-EC Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115



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From: (b) (6)
To: (b) (6)
Cc: Steventon, John (FAA)

Subject: RE: Questions relating to COA

 Date:
 Monday, November 17, 2014 6:18:00 PM

 Attachments:
 COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

(b) (6)

The only change to the program has been an update on the 8900.227 which is not 8900.1 (Which I have attached) and the fact that I have changed contractors however am still doing the same job. I am now with (b) (6) working for the FAA's Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

So here is the information I send out to interested public agencies.

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THE FIRST STEP.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agency's County or State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the State Attorney

General or County Attorney and their appropriate legal counsel.

STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

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- 1. An Airworthiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
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Respectfully,

(b) (b)

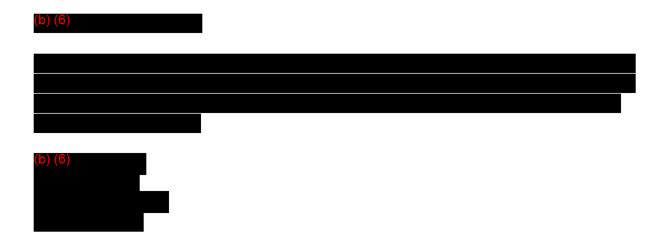
Senior Aviation Analyst

Air Traffic and Law Enforcement/SAC-EC Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115



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From: (b) (6)
To: (b) (6), (b)
Cc: Steventon, John (FAA)

Subject: RE: Access

Date: Wednesday, December 10, 2014 6:36:00 PM

Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

(b) (6)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft
Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law
enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned
Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the
National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation
Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle
law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Respectfully,

(b) (6)

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Wednesday, December 10, 2014 10:55 AM

To: (b) (6), (b)

Cc: (b) (6)

Subject: RE: Access

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(A)

Sent: Wednesday, December 10, 2014 1:46 PM

To: Reyes-Garcia, Dina (FAA)

Subject: FW: Access

I am attempting to apply for a COA permit so we can get our newly purchased Drone in service. My Sheriff spoke with Raymond A Peterson out of the FAA Milwaukee, WI office and he provided our agency some valuable information to obtain this permit. I have went to the COA Online system and I am able to get to the user id / password page although I have not signed up to get a user id and password so I can continue this process.

This piece of equipment would by used by the Chippewa County Wisconsin Sheriff's Office for Law Enforcement purposes.

Respectfully,

(b) (6)

Chippewa County Sheriff's Office 32 East Spruce Street Chippewa Falls, WI 54729

(b) (6)



From: (b) (6) On Behalf Of oeaaa_helpdesk

Sent: Monday, December 08, 2014 2:54 PM

To: (b) (6), (b) (7) oeaaa_helpdesk

Cc: (b) (6)
Subject: RE: Access



To request COA On-line access to apply for a COA.

Email <u>dina.reyes-garcia@faa.gov</u>, the COA On-line administrator with:

The name of the government agency/university that is requesting the COA and the concept of operation.

Please view the UAS web page at http://www.faa.gov/uas or email the FAA/UAS office at 9-AJR-36-UAS@faa.gov with any questions or for more information regarding Certificates of Waiver or Authorization.

(b) (6) Support Desk Staff 202-580-7500

oeaaa helpdesk@cghtech.com

From: (b) (6), (b) (7)(C)

Sent: Monday, December 08, 2014 3:40 PM

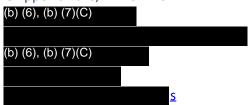
To: oeaaa helpdesk Cc: (b) (6) Subject: Access

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Respectfully,



Chippewa County Sheriff's Office 32 East Spruce Street Chippewa Falls, WI 54729



 From:
 (b) (6)

 To:
 (b) (6), (b) (7)(C)

 Cc:
 Steventon, John (FAA)

 Subject:
 RE: COA On-Line access

Date: Monday, December 15, 2014 8:44:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft
Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law
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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Monday, December 15, 2014 2:23 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA On-Line access

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Monday, December 15, 2014 4:55 PM

To: Reyes-Garcia, Dina (FAA) **Subject:** Re: COA On-Line access

Sure,

(1) Taylor County Sheriffs Office, Kentucky

(b) (6), (b) (7)(C)

- (2) Phantom 2 guad copter with GPS auto return
- (3). Use with search and rescue, officer safety on high risk incidents and marijuana eradication assistance

Thank you

Sent from my iPhone

On Dec 15, 2014, at 16:37, < Dina.Reyes-Garcia@faa.gov > wrote:

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

From: (b) (6), (b) (7)(C)

Sent: Monday, December 15, 2014 2:53 PM

To: Reyes-Garcia, Dina (FAA) Subject: COA On-Line access

We are requesting access to the COA online for the purpose of submitting an application to register and operate a UAS.

Any assistance would greatly be appreciated..

thanks in advance

(b) (6), (b) (7)(C)

Taylor County Sheriff's Department, Kentucky

<image001.jpg>

From: (b) (6)

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA)

Subject: RE: COA

Date: Monday, December 15, 2014 8:39:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C) -

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft
Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law
enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned
Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the
National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation
Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle
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Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agency's, County or State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the County or State Attorney General and their appropriate legal counsel.

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and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
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STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

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- · An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or County Attorney (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Monday, December 15, 2014 10:12 AM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Thursday, December 11, 2014 11:54 AM

To: Reyes-Garcia, Dina (FAA)

Subject: COA

Dina,

We would like to be set up for a COA online account, and move forward with an UAS for the Sheriff's Office. The information that you have requested is below.

- 1. The Livingston County Sheriff's Office
- 4 Court St

Geneseo NY 14454

585-243-7100

2. UAS:

DJI S900 Hexacopter with A2 + Futaba 14SG Radio

GoPro Black Hero4

(b) (6)

3. Uses:

Missing Person searches
Fleeing Suspect searches
Aerial Crime Scene photographs and video

Aerial Accident Scene photographs and video

Disaster Area photographs and video Fire scene documentation Tactical / Swat incidents Monitor Traffic / Crowd at large gatherings

Thank you,

(b) (6), (b) (7)(C)

4 Court St. Geneseo, NY 14454 (b) (6), (b) (7)

This message may contain confidential information for the use of the addressee(s) above and may contain legally privileged information. If you are not the addressee, or the person responsible for delivering it to the addressee, you are hereby notified that reading, disseminating, distributing, or copying this message is strictly prohibited. If you have received this message by mistake, immediately notify us by replying to the message and delete the original message immediately thereafter. Thank you.

 From:
 (b) (6)

 To:
 (b) (6), (b)

 Cc:
 Steventon, John (FAA)

Subject: RE: COA

Date: Friday, January 02, 2015 8:09:00 AM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx



Great to speak with you. As I mentioned on the phone my name is (b) (6) . I am a contractor with working for the Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Thursday, January 01, 2015 6:10 PM

To: (b) (6)
Subject: COA

Hi (b) (6) this is to introduce myself.

(b) (6), (b) (7)(C)

Mount Carmel Township 300 Laural Street Atlas, PA 17851

(b) (6), (b) (7)(C)

while I was with (b) (6)

at Quantico he

recommended I reach out to you for help setting this up. My Cell number (b) (6), (b) (7)

I am also a Private Pilot

and Own a Plane at N79 (b) (6)

From: (b) (6

To: (b) (6), (b) (7)(C)
Cc: Grampp, Donald E (FAA); (b) (6

Subject: RE: Drone Operation

Date: Wednesday, December 10, 2014 2:44:00 PM

Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

(b) (6), (b) (7)(C)

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working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical

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(b) (6)

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----Original Message-----

From: (b) (6)

Sent: Friday, December 05, 2014 6:51 AM

 $T_{0:}$ (b) (6)

Cc: Grampp, Donald E (FAA); Ripko, Elena CTR (FAA)

Subject: FW: Drone Operation

- Sheriff's office in KY

Best,

(b) (6)

Int. II Systems Analyst
FAA Aviation Safety (AVS)
UAS Integration Office (AFS-80)

(b) (6)

www.faa.gov/uas

----Original Message-----

From: (b) (6), (b) (7)(C)

Sent: Friday, December 05, 2014 9:18 AM

 $T_{O:}$ (b) (6)

Subject: Drone Operation

I work for the sheriffs office in Northern Kentucky. I am looking to speak to someone in reference to our agency operating a drone for emergency operation services are you able to give me a contact number of someone I could speak to on the phone?

(b) (6), (b) (7)(C)

Sent from my iPhone

From: (b) (6)
To: (b) (6), (b) (7)
Cc: Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

Date: Wednesday, December 10, 2014 1:45:00 PM

Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

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Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- 3. A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement/(b) (6) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJR-36-UAS

Sent: Thursday, December 04, 2014 11:03 AM

To: (b) (6), (b) (7)(C) Cc: (b) (6)

Subject: Re: Message from www.faa.gov: Questions relating to <abbr>COA</abbr>

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

rsturges---12/03/2014 01:13:43 PM--(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C) To 9-AJV-115-UASCOA/AWA/FAA@FAA,

12/03/2014 01:13 PM Subject Message from <u>www.faa.gov</u>: Questions relating to

CC

<abbr>COA</abbr>

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/faq/

Message:

Hello I am a SWAT team commander in South Carolina. I am researching the idea of a UVA for our team and I was wondering is you could direct me to a resource I can use to help me in knowing what procedures we need to follow or what steps we need to take.

thank you for your time

(b) (6), (b) (7)(C)

From:

To:

Cc:

John Steeventon@faa.gov"

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

 Date:
 Wednesday, December 10, 2014 1:42:00 PM

 Attachments:
 Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b)

As a way of introduction, my name is (b) (6) ... I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The short answer to your question is yes. To operate an unmanned aircraft at any altitude, regardless of the weight, in the National Airspace System requires a Certificate of Waiver/Authorization (COA).

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

I can provide you will additional information upon request.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) Liaison Supporting Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section. AFS-85/AIV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJR-36-UAS

Sent: Thursday, December 04, 2014 11:06 AM

To: (b) (6), (b) (7)(C)

c: John.Steeventon@faa.gov; (b) (6)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your email has been forwarded to Mr. John Steventon, who will continue to assist you with your law enforcement questions. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

(b) (6), (b) (7)(C)

(b) (6), (b) (7)

To 9-AJ

9-AJV-115-UASCOA/AWA/FAA@FAA,

12/04/2014 12:14 PM

Subject

Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/about/office.org/headquarters.offices/ato/service.units/systemops/aaim/organizations/uas/coa/

Message:

I am a representative of the San Diego County District Attorney's Office, the chief Law Enforcement Agency for San Diego County. Does our office need a COA to fly a drone quadcopter at altitudes under 400 feet during daylight and away from regional airports for the purpose ot taking crime scene photographs?

Thank you for any information you can provide.



From: (b) (6)

To: (b) (6), (b) (7)(C) Cc:

Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Tuesday, December 23, 2014 8:37:00 AM

Attachments: image001.gif

image003.png image004.png

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b) (7)

As an introduction, my name is (b) (6) . I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

To answer your questions yes, the FAA will issue a COA for the operation of the Phantom II Vision and yes, you will need as a minimum to have completed the FAA's Private Pilot ground school and pass the written test if your UAS operation will take place below 400 feet Above the Ground (AGL), in Visual flight Rule (VFR) Conditions, day time operations, line of sight of the UAS, in class G airspace that is greater than 5 nautical miles from any heliports or airports. Outside of this criterion the pilot in command must have, as a minimum, a Private Pilot license. (See FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16, chapter 4, Section 16-4-1-3, B.5).

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-ofcontrol link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agency's County or State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the

application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the County or State Attorney General and their appropriate legal counsel.

STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to **training and evaluation** activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.). Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

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The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

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Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

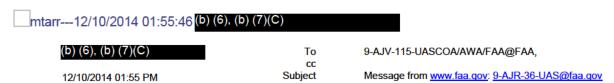
Sent: Monday, December 22, 2014 6:50 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, Mr. Steve Pansky, who will continue to assist you with your questions. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

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Message:
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Our agency (Hamilton County Sheriff's Office, Cincinnati, OH) is interested in obtaining a very small UAS for the purpose of documenting
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traffic crash scenes with overhead photos and video. We would be operating at very low-level (50'-75') for very short periods of time over closed crash scenes. The UAS we are interested in is a DJI Phantom II Vision. I have received conflicting information as to whether the FAA would grant a COA for that particular device and whether or not the operator would need to obtain or possess a pilots license. Could you answer either of those questions?

(b) (6), (b) (7)(C)

From: (b) (6)

To: (b) (6), (b) (7)(C)
Cc: "John Steeventon@faa.gov

 Cc:
 "John.Steeventon@faa.gov"; Reyes-Garcia, Dina (FAA)

 Subject:
 RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Tuesday, December 23, 2014 8:58:00 AM

Attachments: <u>image001.gif</u>

image003.png image004.png

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6), (b)

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To answer your questions, the information below explains how a public agency applies for approval with the FAA to operate a small unmanned aircraft system. For those operations that are within 5 nautical miles of an airport or heliport the pilot in command needs to have as a minimum a private pilot license. If the UAS operation takes place greater than 5 NMs from an airport or heliport and the operation is conducted below 400 feet Above the Ground (AGL), in Visual flight Rule (VFR) Conditions, day time operations, line of sight of the UAS, in class G airspace the pilot need only have completed the FAA's Private Pilot ground school and pass the written test (See FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16, chapter 4, Section 16-4-1-3, B.5).

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Respectfully,

(b) (6)

Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Monday, December 22, 2014 7:14 PM

To: (b) (6), (b) (7)(C)

Cc: John.Steeventon@faa.gov; (b) (6), (b) (7)(C)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your email has been forwarded to Mr. John Steventon, who will continue to assist you with your law enforcement questions. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

jwilliams---12/16/2014 10:08:27 (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

9-AJV-115-UASCOA/AWA/FAA@FAA,

12/16/2014 10:08 AM

Subject

To

CC

Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

Could you please provide me with the rules and regulations for a local police department seeking to purchase a quad-copter less than 4 lbs in weight. It would be used in daylight hours, with line of sight. Are any specific permits or license required by the FAA before it can be utilized. We do have an airport in this city, (Bridgeport, WV). If/how would this effect our eligibility?

From: (b) (6) To: (b) (6), (b) (7

Cc: Steventon, John (FAA); (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Tuesday, December 23, 2014 9:30:00 AM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6), (b)

As an introduction, my name is (b) (6)

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To answer your question, the process of approval to operate a small unmanned aircraft system has been developed so as to allow for the rapid deployment of a system in support of safety missions. This is a two phased process is described below as part of the COA application process.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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STEP TWO.

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 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
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STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- · A review of the agency's UAS training and proficiency program, to include all training records
- A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- · A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public

declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (b)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Monday, December 22, 2014 7:26 PM

To: (b) (6), (b) (7)(C)

Cc: Steventon, John (FAA); (b) (6)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your email has been forwarded to Mr. John Steventon, who will continue to assist you with your law enforcement questions. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

zielinskin---12/18/2014 06:49:59 (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

To 9-AJV-115-UASCOA/AWA/FAA@FAA,

CC

12/18/2014 06:49 AM

Subject Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

I have a question after reading the general conditions using a UA for a public entity. I work for a Sheriff's Office in Palm Beach County Florida. My question is in regards to the approval being for only a specific place and time frame. The UA would be deployed at crime scenes to take perspective photographs while the scene is still active full of evidence. Basically, we would never be able to know where it is being deployed until that instance. How can this be done? The UA would be used to take aerial photos at a height under 100 feet, and within an area of possibly 50 or 100 feet in all directions. Can you address this question. Thank you

From: (b) (6)
To: (b) (6), (b) (7)(C)
Cc: Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Tuesday, December 23, 2014 9:36:00 AM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Monday, December 22, 2014 7:29 PM

To: (b) (6), (b) (7)(C) Cc: Pansky, Steven CTR (FAA)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

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kwalb---12/18/2014 11:34:19 (b) (6), (b) (7)(C) (b) (6), (b) (7)(C) То 9-AJV-115-UASCOA/AWA/FAA@FAA. Subject Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public operations/

Message:

12/18/2014 11:34 AM

Good morning. I am a SWAT Officer with the city of San Diego. I am trying to figure out what I need to do in order to legally use an UAV during SWAT missions. Often times we have no air support from our ABLE unit because they do no operate from 0200-0700. Having overhead situational awareness of where our officers are and where the holes may be in a perimeter are extremely important. We currently use robots on the ground for interior problems, but would like to develop a UAV program. These UAV's would not go above 50 feet and they would be used for personnel accountability and or perimeter containment. If you could assist me with what I need to do or who I need to contact in order to legally use a UAV, I would greatly appreciate it. Thank you for your time.

From:
To:
Cc: Steventon John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

 Date:
 Tuesday, December 23, 2014 9:47 00 AM

 Attachments:
 COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Monday, December 22, 2014 7:35 PM

To: (b) (6), (b) (7)
Cc: (b) (6)
Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

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dbower---12/19/2014 10:28:32 (b) (6), (b) (7)(C)

(b) (6), (b)

То CC 9-AJV-115-UASCOA/AWA/FAA@FAA,

12/19/2014 10:28 AM

Subject

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This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/about/office.org/headquarters offices/ato/service units/systemops/aaim/organizations/uas/coa/

Message:

CA State University Police Department wishes to apply for a COA to operate a small "quadcopter" in connection with emergencies that may occur on and adjacent to the campus. I attempted to find an application through the UA COA link, however I don't have a log-in and password to access the site. Can you please advise the procedure for obtaining an application for a COA? Thanks for your assistance.

From: To: Cc:

Steventon, John (FAA)

Subject: RE: Plant City Police Department Date: Monday, December 22, 2014 3:55:00 PM Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

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STEP THREE.

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I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Monday, December 22, 2014 11:59 AM

To: (b) (6)

Subject: Plant City Police Department

Requesting information for UAS.

(b) (6), (b) (7)(C)

Plant City Police Department

(b) (6), (b) (7)(C)

-- Please Note: Florida has a very broad public records law. Most written communications to or from government officials regarding government business are public records available to the public and media upon request. Your email communications may be subject to public disclosure. (Chapter 119, Florida Statutes)

From: To: Cc:

Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Monday, January 26, 2015 12:57:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6), (b) (7)(C)

requests.

First let me apologize for not responding to you in a timelier manner. As a way of introduction, my name is . I am a contractor with (b) (6) the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the

requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6)
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

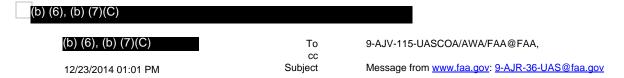
Sent: Wednesday, January 21, 2015 1:26 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

We are a municipal police department in the St. Louis County Missouri area. We are starting to research about drones and how they can be used for our operations. I know that certain steps have to be made in to obtain the rights to fly a drone for our use. Can you please inform me what steps we have to do, in order to complete this process. I attempted to see the online forms but it says you have to have a login to proceed any further, and I knowing the proper steps.

(b) (6), (b) (7)(C)

12355 Natural Bridge 63044

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6),

Cc: Steventon, John (FAA)

Subject: RE: Small UAS for law enforcement

Date: Thursday, January 22, 2015 7:49:00 AM



As an introduction, my name is (b) (6) . I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The short answer to your question is yes, you can operate an unmanned aircraft system for tactical situations however you will need approval from the FAA to operate the UAS. The size of the UAS or the fact that the proponent only wishes to operate at very low altitudes does not negate the requirement for approval from the FAA. The process for this approval is described below.

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, January 20, 2015 10:43 AM

To: (b) (6

Subject: Small UAS for law enforcement

Good afternoon,

I'm sure you've had various versions of this question come to you more times that you can count, but I have some UAS questions for you. I work for a local police department that has a tactical unit and we have discussed the use of a multirotor with video equipment after a recent callout. We are looking for information regarding the legality in using such a device for law enforcement. In tactical use, we would be flying the device fairly low, definitely below tree-top level and far less altitude than would be an issue for any manned aircraft. (We estimate the majority of the deployment time would be spent at an altitude less than that of the structure we are working with). On a recent callout we were covering several acres and could not see vast areas of the property we did not want send people to on foot because of the rifles the suspect owned and a line of sight. We thought a UAS would be beneficial and safe in this instance.

Also, we are the largest jurisdiction covering a flood area, and the device could possibly be used in emergency situations to search for people, but with the limited battery life, that is far less likely.

In it's simplest form my question is, can we as a police department use a multi rotor at low altitude to supplement manpower in tactical emergency situations with the use of video?

Would a pilot's certificate (private or light sport) help or change the dynamics any?

Thank you for your time.

(b) (6), (b) (7)(C)

Terre Haute Police Department

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sole use of the intended recipient(s) and may contain confidential and privileged information. If you are not the intended recipient, you may NOT use, disclose, copy or disseminate this information. Please contact the sender by reply e-mail immediately and destroy all copies of the original message including all attachments. Your cooperation is greatly appreciated. The City of Terre Haute 17 Harding Avenue Terre Haute, IN 47807

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From: To: Cc: venton John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Monday, January 26, 2015 1:00:00 PM

Attachments:

Aircraft Registration.docx COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png mage004.png

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- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (www.faa.gov/uas) that describes he COA process and an example of the application.

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I understand hat the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance

Respectfully,

Senior Avia ion Anaivs Air Traffic and Law Enforcement

Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tac ical Operations Section, AFS-85/AJV-115

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, January 21, 2015 1:28 PM

To: (b) (6), (b) (7)(C) Cc: (b) (6)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) when will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and he COA process.

fnguyen--12/23/2014 02:32:25(b) (6), (b) (7)(C)

(b) (6), (b) (7)

То

9-AJV-115-UASCOA/AWA/FAA@FAA,

12/23/2014 02:32 PM

Subject

Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/about/office.org/headquarters.offices/ato/service_units/systemops/aaim/organizations/uas/coa/

Message:

Dear Sir/Madam.

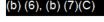
I am a police officer with the Santa Ana Police Department in Orange County, California. I am SWAT/CNT Team, and we were considering using the Draganfly UAV or similar UAV during deployment I am also on the

I am working on a proposal that would "sell" the idea to management. Part of the proposal, would include having already obtained or cleared to obtain a COA. However, in reading some of the documents, I believe a UAV must already be in our possession. Is this correct?

If not, can I get an account set up to complete the on-line application?

Does the account need to be in the Department's name for log on purposes, or can it be for myself at this point in the application process? The end user will be a selected few members of the Department's SWAT Team.

Respectfully,



(6), (b) (7)(C)

From: (b) (6) To: (b) (6),

Cc: Steventon, John (FAA)

Subject: RE: Small UAS for law enforcement

Date: Monday, January 26, 2015 10:43:00 AM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

(b) (6),

First let me apologize for not responding to you in a timelier manner. As a way of introduction, my name is (b) (6)

I am a contractor with (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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To answer your two questions....

Can we as a police department use a multi rotor at low altitude to supplement manpower in tactical emergency situations with the use of video? Yes, with approval from the FAA. Would a pilot's certificate (private or light sport) help or change the dynamics any? As you review the 8900.1 you will see that having a private pilot certificate will allow greater access to the jurisdiction you wish to operate within.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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 and that the it will be operated and maintained in strict compliance with the manufacturer's
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(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6), (b) (7)(C)

Sent: Tuesday, January 20, 2015 10:43 AM

To: (b) (6), (b) (7)(C)

Subject: Small UAS for law enforcement

Good afternoon,

I'm sure you've had various versions of this question come to you more times that you can count, but I have some UAS questions for you. I work for a local police department that has a tactical unit and we have discussed the use of a multirotor with video equipment after a recent callout. We are looking for information regarding the legality in using such a device for law enforcement. In tactical use, we would be flying the device fairly low, definitely below tree-top level and far less altitude than would be an issue for any manned aircraft. (We estimate the majority of the deployment time would be spent at an altitude less than that of the structure we are working with). On a recent callout we were covering several acres and could not see vast

areas of the property we did not want send people to on foot because of the rifles the suspect owned and a line of sight. We thought a UAS would be beneficial and safe in this instance.

Also, we are the largest jurisdiction covering a flood area, and the device could possibly be used in emergency situations to search for people, but with the limited battery life, that is far less likely.

In it's simplest form my question is, can we as a police department use a multi rotor at low altitude to supplement manpower in tactical emergency situations with the use of video?

Would a pilot's certificate (private or light sport) help or change the dynamics any?

Thank you for your time. (b) (6), (b) (7)(C)

Terre Haute Police Department

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This email has been scanned for email related threats and delivered safely by Mimecast. For more information please visit http://www.mimecast.com

From:

To:

Cc: Steventon, John (FAA)

RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov Subject:

Date: Monday, January 26, 2015 2:16:00 PM

Attachments: image001.gif

image003.png image004.png

Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

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Sent: Wednesday, January 21, 2015 1:40 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

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(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

To 9

9-AJV-115-UASCOA/AWA/FAA@FAA,

12/30/2014 11:14 AM

Subject

Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public operations/

Message:

I am researching buying a quadcopter for law enforcement purpose of documenting aerial photographs of crime scenes. Can I request a Certificate of Waiver or Authorization before I buy the quadcopter I am considering getting?

From:

To:

Cc:

Steventor John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Monday, January 26, 2015 2:28:00 PM

Attachments: Aircraft Registration.docx
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image001.gif image003.png image004.png

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I understand hat the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further

Respectfully,

Senior Avia ion Analyst

Air Traffic and Law Enforcement Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tac ical Operations Section, AFS-85/AJV-115

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, January 21, 2015 3:24 PM

To: (b) (6), (b) (7)(C) Cc: (b) (6), (b) (7)(C)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and he COA process.

(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

01/09/2015 06:54 AM

9-AJV-115-UASCOA/AWA/FAA@FAA,

CC Subject

Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
http://www.faa.gov/about/office org/headquarters offices/ato/service units/systemops/aaim/organizations/uas/coa/

Message:

Sir/Madam:

I am (b) (6), (b) the Wilmington Police Departments (b) (6), (b) (7)(C) in Wilmington, Delaware. We asked by the FAA rules and stay at proper altitudes and way below any minimum requirements. Our use is very limited to a specific scene in our jurisdiction. We normally fly approximately 50-100 feet in altitude and approximately 100-200 feet in any direction. We have a policy and I am currently the only authorized person to fly it. I would like to obtain a proper COA W are a government entity who has very limited use. Can you please contact me at my email address of (b) (6), (b)

Respectfully,

(b) (6), (b) (7)(C)

From: (b) (6)
To: (b) (6)
Cc: (b) (6)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Monday, January 26, 2015 2:36:00 PM
Attachments: Aircraft Registration.docx

Aircraft Registration.docx COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6), (b) (7)(C)

First let me apologize for not responding to you in a timelier manner. As a way of introduction, my name is (b) (6) . I am a contractor with working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am he Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and he FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

We did have some communica ion with Sgt. Sell back in October 2014 on operating a UAS in the NAS. I have copied him on this email. And a quick answer to your question on having a private pilot certificate is yes. It is important to operate within 5 NMs of an Airport or heliport regardless of the Class of airspace. See Order 8900.1 attachment.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the Na ional Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" opera ions. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Informa ion Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to training and evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordina ion among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- 1. An Airwor hiness Release (AWR) statement from the Proponent's accountable executive acknowledging that the Proponent accepts all responsibility for ensuring that he UAS is airworthy and that the it will be operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- 3. A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
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(Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, he FAA will conduct an on-site program review and evaluation. This on-site review will include:

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Respectfully,

Senior Avia ion Analyst
Air Traffic and Law Enfo

Air Traffic and Law Enforcement Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tac ical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, January 21, 2015 3:48 PM

To: (b) (6), (b) (7) Cc: (b) (6)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) , who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and he COA process.

(b) (6), (b) (7)(C)

(b) (6), (b) (7)

To cc 9-AJV-115-UASCOA/AWA/FAA@FAA

01/15/2015 08:12 AM

Subject

Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: <a href="http://www.faa.gov/about/office.org/headquarters.offices/ato/service_units/systemops/aaim/organizations/uas/coa/http://www.faa.gov/about/office.org/headquarters.offices/ato/service_units/systemops/aaim/organizations/uas/coa/http://www.faa.gov/about/office.org/headquarters.offices/ato/service_units/systemops/aaim/organizations/uas/coa/http://www.faa.gov/about/office.org/headquarters.offices/ato/service_units/systemops/aaim/organizations/uas/coa/http://www.faa.gov/about/office.org/headquarters.offices/ato/service_units/systemops/aaim/organizations/uas/coa/http://www.faa.gov/about/office.org/headquarters.offices/ato/service_units/systemops/aaim/organizations/uas/coa/http://www.faa.gov/about/office.org/headquarters.offices/ato/service_units/systemops/aaim/organizations/uas/coa/http://www.faa.gov/about/office.org/headquarters.offices/ato/service_units/systemops/aaim/organizations/uas/coa/http://www.faa.gov/about/office.org/headquarters.offices/ato/service_units/systemops/aaim/organizations/uas/coa/http://www.faa.gov/about/office.org/headquarters.offices/ato/service_units/systemops/aaim/organizations/uas/coa/http://www.faa.gov/about/offices/ato/service_units/systemops/aaim/organizations/uas/coa/http://www.faa.gov/about/offices/ato/service_units/systemops/aaim/organizations/uas/coa/http://www.faa.gov/about/offices/ato/service_units/systemops/aaim/organizations/uas/coa/http://www.faa.gov/about/offices/ato/service_units/systemops/aaim/organizations/uas/coa/http://www.faa.gov/about/offices/ato/service_units/systemops/aaim/organizations/uas/coa/http://www.faa.gov/about/organizations/aaim/organizations/aaim/organizations/aaim/organizations/aaim/organizations/aaim/organizations/aaim/organizations/aaim/organizations/aaim/organizations/aaim/organizations/aaim/organizations/aaim/organizations/aaim/organizations/aaim/organizations/aaim/organizations/aaim/organizations/aaim/o

Message:

I am a (b) (6), (b) (7)(C) with the Livingston County Sheriff's Office in Howell, Mi. Our office has purchased copter with a camera mounted (drone). Flying weight is under 5lbs. What are the requirements for my agency to operate this unit? We have no class B airspace in our jurisdiction. The primary airport in Livic crime scenes. (b) (6)

From: To: Cc:

Steventon, John (FAA)

Subject: RE: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

Date: Monday, January 26, 2015 2:43:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6), (b) (7)(C)

Chief Pilot, Snohomish County Sheriff's Office, WA

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To quickly answer your question, the COA process takes 60 Business days to complete however I have provided you with the program information on how we have developed a sUAS program for Law Enforcement/Fire/First Responders so as to allow them to respond to events and deploy the UAS within 60 minutes of notification to the FAA.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

Sent: Wednesday, January 21, 2015 3:53 PM

To: (b) (6), (b) (7)(C)
Cc: (b) (6), (b) (7)(C)

Subject: Re: Message from www.faa.gov: 9-AJR-36-UAS@faa.gov

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william.guistorf---01/15/2015 04:20:21 PM---william.guistorf@snoco.org

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page: http://www.faa.gov/uas/public_operations/

Message:

If a government agency registers a UAS with the FAA, what is the quickest time that a COA can be issued in the event of an emergency? (example: suspected explosive device on top of a high rise building, SWAT team wants to use the UAS to inspect the rooftop.)

Deputy Bill Quistorf Chief Pilot, Snohomish County Sheriff's Office, WA cell 425-754-5489 From: (b) (6)
To: (b) (6).

Cc: Steventon, John (FAA)

Subject: RE: COA

Date: Tuesday, January 06, 2015 8:18:00 AM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

image001.jpg

(b) (6), (b) (7)

As an introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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THE FIRST STEP.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agency's County or State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (**not for Commercial Purposes**). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the County or State Attorney General and their appropriate legal counsel.

STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to **training and evaluation** activities at a specific training site that is confined to Class G airspace, remaining well clear of

housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- 3. A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

- A review of the agency's UAS training and proficiency program, to include all training records
- · A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office or County Attorney (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this

response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA)

Sent: Monday, January 05, 2015 5:14 PM

To: (b) (6), (b)
Cc: (b) (6)

Subject: RE: COA

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) who will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.

From: (b) (6), (b) (7)(C)

Sent: Wednesday, December 31, 2014 10:59 AM

To: Reyes-Garcia, Dina (FAA)

Subject: COA

Adams County Sheriff's Office 301 Adams St. PO Box 279 Friendship, WI 53934

(b) (6), (b) (7)

DJI Inspire 1, quad prop device with camera

The Adams County Sheriff's Office intends to use the above device for very specific and limited uses to include but not limited to search and rescue, department training operations, active criminal apprehensions, and when necessary assist with search warrant executions where specifically listed and allowed.

Thanks for consideration.

(b) (6),	(b) (7))(C)		

From: (b) (6)

To: (b) (6), (b)

Cc: Steventon, John (FAA)

Cc: Steventon, John (FAA)

Subject: DE: COA/Drang Heage and

Subject: RE: COA/Drone Usage and site loggon Date: Monday, January 26, 2015 1:40:00 PM

Attachments: Aircraft Registration.docx

COA Process Initial Itr Template.doc Order 8900 1 Volume 16.docx

image001.gif image003.png image004.png

(b) (6), (b) (7)

First let me apologize for not responding to you in a timelier manner. As a way of introduction, my name is (b) (6)

I am a contractor with (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the Agencies City, County or State Attorney's office (Depending of the agency requesting the approval). This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

Additionally, Title 49 §§ 44101-44104 prohibit operation of unregistered aircraft and establish the

requirements for aircraft registration. The regulations implementing those requirements are found in 14 CFR part 47. Public Aircraft are not exempted from the registration requirements. Under § 47.3, aircraft owned by U.S. citizens, lawfully admitted permanent residents of the United States, and U.S. corporations are eligible for registration and operation. I have also attached document speaks to the aircraft registration process for registering your unmanned aircraft system. Please be aware that you will not be able to complete the COA online program until your unmanned aircraft is registered.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to **training and evaluation** activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

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- · A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to

mitigate any attendant hazard for UAS)

· An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations) and the registration of the unmanned aircraft system with the FAA. The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter and the proponent has filed for registration of the UAS.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: Reyes-Garcia, Dina (FAA) On Behalf Of 9-AJV-115-UASCOA (FAA)

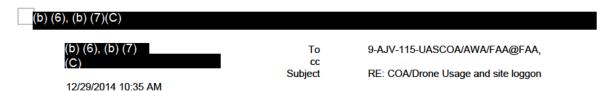
Sent: Wednesday, January 21, 2015 1:33 PM

To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: COA/Drone Usage and site loggon

Thank you. Your case has been assigned to our Law Enforcement liaison, (b) (6) which will continue to assist you with the COA process. Please be advised that your email will be responded to in the order it was received. You may also visit our website (www.faa.gov/uas) to learn more on COAs and the COA process.



Thank you for your response, we are municipal police/fire agency in Summerville South Carolina (Town of Summerville Police and Fire).

Currently we operate two non-commercial drones (at this point they are a quad copter manufactured by DJI).

At this point in time and based off of the current policy we are developing within the standards of South Carolina Law Enforcement Accreditation a defined purpose as to remote visual real time monitoring of working incidents.

So basically we want to use them for search and rescue along with fire ground operations.

I know that this is all new and very much to us but I want to make sure that we deploy this correctly and to FAA/Federal/State standards. Any information on the process plus applications that we will need to fill out would be appreciated.

Thanks,

(b) (6), (b)

Summerville Police/Fire Departments

(b) (6), (b) (7)(C) (b) (6), (b) (7)(C)

(843) 875-1650 (PSAP Non-Emergency)

 $\textbf{From: } \underline{\textbf{Dina.Reyes-Garcia@faa.gov}} \ [\underline{\textbf{mailto:Dina.Reyes-Garcia@faa.gov}} \ \textbf{On Behalf Of } \underline{\textbf{9-AJV-115-}}$

UASCOA@faa.gov

Sent: Monday, December 22, 2014 10:37 PM

To: (b) (6), (b) (7)(C)

Subject: Re: COA/Drone Usage and site loggon

Please provide the following information: (1) public agency requesting the COA (2) small description of the UAS and (3) concept of operation.

(b) (6), (b) (7)(C)

To9-AJV-115-UASCOA/AWA/FAA@FAA, cc

SubjectCOA/Drone Usage and site loggon

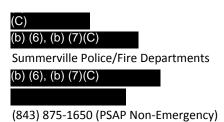
12/19/2014 02:43 PM

Dear Sir/Madam,

We are looking to obtain a COA and site logon to apply for COA. If you could direct us in the right direction I would really appreciate it.

Thanks,





This email and its attachments may be confidential and are intended solely for the use of the individual to whom it is addressed. Any views or opinions expressed are solely those of the author and do not necessarily represent those of the Town of Summerville. If you are not the intended recipient of this email and its attachments, you must take no action based upon them, nor must you copy or show them to anyone. Please reply to the sender if you believe you have received this email in error.

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From: To:

Ripko, Elena CTR (FAA); Forro, Elizabeth (FAA); "airport@psci.net" Cc:

RE: Law Enforcement Engagement with Suspected Unauthorized UAS Operations Subject:

Date: Wednesday, January 14, 2015 11:36:00 AM

Attachments: image001.gif

image002.gif

b) (6), (b)

As an introduction, my name is (b) (6) . I am a contractor with (b) (6) working for the Federal Aviation Administration Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The short answer to your question is yes, you can operate an unmanned aircraft system for forensic photography however you will need approval from the FAA to operate the UAS. The process is described below.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-ofcontrol link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

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response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

Senior Aviation Analyst
Air Traffic and Law Enforcement (b) (6) Liaison
Supporting Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115
(b) (6)

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From: (b) (6)

Sent: Wednesday, January 14, 2015 8:10 AM

To: (b) (6)

Cc:

Subject: FW: Law Enforcement Engagement with Suspected Unauthorized UAS Operations

Hi – two email down, an inquiry from the Indiana State Police, (b) (6), (b) (7)(C)

I'll follow up with the Dubois County Airport Authority to let them know we're handling.

Best,

(b) (6), (b) (7)(C)

FAA Aviation Safety (AVS) UAS Integration Office (AFS-80) 202-267-7239

(b) (6), (b) (7)(C)

www.faa.gov/uas

From: Dubois County Airport Authority - KHNB [mailto:airport@psci.net]

Sent: Wednesday, January 14, 2015 10:48 AM

To: (b) (6), (b) (7)(C)

Subject: Fwd: Law Enforcement Engagement with Suspected Unauthorized UAS Operations

Good morning (b) (6), (b)

I received the note below from our State Police.

If you could help me respond to his inquiry it would be great!



----- Forwarded message -----

From: (b) (6), (b) (7)(C)

Date: Wed, Jan 14, 2015 at 9:24 AM

Subject: RE: Law Enforcement Engagement with Suspected Unauthorized UAS Operations

To: Dubois County Airport Authority - KHNB < airport@psci.net>

(b) (6),

Thank you for the information, this is good stuff.

I have a question regarding UAV's and the ability of law enforcement to use them. I would like to start using one for crash reconstructions. It would allow me to take aerial photographs and video of the scene, as well as take a picture directly over the scene that I could import and use with software to make a scale diagram. Per FAA regulations, am I allowed to do that, with most of the flight time being directly over public areas? The benefits that this could allow me are off the chart, and it could be groundbreaking nationwide if I get this to work right, BUT, I want to make sure I CAN do it. \odot

Thank you!!

(b) (6), (b) (7)(C)
Indiana State Police - Jasper District
Public Information Office
2209 Newton Street
Jasper, IN 47546
1-800-742-7475
(b) (6), (b) (7)(C)
(b) (6), (b) (7)(C)

Statement of Confidentiality: This message is intended only for the individual or entity to which it is sent and may contain information that is privileged, confidential, and protected from disclosure under applicable law. If you are not the intended recipient, or the agent responsible for delivering the message to the recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is prohibited. If you have received this message in error, please notify the sender immediately and destroy all copies of the original message.

From: Dubois County Airport Authority - KHNB [mailto:airport@psci.net]

Sent: Monday, January 12, 2015 4:21 PM

To: (b) (6), (b) (7)(C)

Subject: Law Enforcement Engagement with Suspected Unauthorized UAS Operations

Good afternoon gentlemen,

I wanted to present some interesting developments for our local/state LEA's, which you may or not know about, in reference to UAS/UAV or "drones".

I believe it would be your decision to distribute.

Website reference: http://www.faa.gov/uas/law_enforcement/

Law Enforcement Engagement with Suspected Unauthorized UAS Operations

There is evidence of a considerable increase in the unauthorized use of small, inexpensive Unmanned Aircraft Systems (UAS) by individuals and organizations, including companies. While the FAA retains the responsibility for enforcing Federal Aviation Regulations, including those applicable to the use of UAS, the agency also recognizes that state and local Law Enforcement Agencies (LEAs) are often in the best position to deter, detect, immediately investigate, and, as appropriate, pursue enforcement actions to stop unauthorized or unsafe UAS operations. The agency's Law Enforcement Guidance for Suspected Unauthorized UAS Operations (PDF) is intended to support the partnership between the FAA and LEAs in addressing these activities.

Information regarding Unauthorized UAS operations at sporting events – including Temporary Flight Restrictions and geographic FAA contact information for LEAs – is available here (PDF).

Have a great week,

(b) (6), (b) (7)(C)

Huntingburg Airport - KHNB Huntingburg Airport Technology Park Dubois County Airport Authority

www.huntingburgairport.com

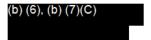
(b) (6), (b) (7)(C) (b) (6), (b) (7)(C)

"Where we are Shovel Ready, with 200 acres, for your Aviation/Aerospace related business, with **ZERO property taxes**"

"No pessimist ever discovered the secret of the stars, or sailed to an uncharted land, or opened a new doorway for the human spirit." **Helen Keller**

Huntingburg Airport - KHNB Huntingburg Airport Technology Park Dubois County Airport Authority

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"No pessimist ever discovered the secret of the stars, or sailed to an uncharted land, or opened a new doorway for the human spirit." **Helen Keller**

From: (b) (6)
To: (b) (6), (b) (7)
Cc: (b) (6)

Subject: RE: LE UAS operations

Date: Friday, January 09, 2015 4:34:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx



Great to speak with you. As a more formal introduction, my name is (b) (6)

Working for the Federal Aviation Administration
Unmanned Aircraft Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO)
coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in
implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in
order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John
Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration
Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

So below is the typical information we provide to inquiries by Law Enforcement with respect to operating an UAS in The NAS.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

Before the FAA grants an agency assess to the COA on-Line to begin an application process, the agency (or proponent) will be asked to provide the FAA with a "declaration letter" from the agency's, City, County or State Attorney's office. This document assures the FAA that the Proponent is recognized as a political subdivision of the government of the State under Title 49 of the United Stated Code (USC) section (§) 40102(a)(41)(c) or (d) and that the proponent will operate its Unmanned Aircraft in accordance with 49 USC. § 40125(b) (not for Commercial Purposes). Access to the COA on-line website and the application program cannot be approved until this declaration letter has been validated by the FAA's Legal Office. You must understand that an Agency's Accountable Executive CANNOT Self-Certify their agency is a "Public" agency. The responsibility for establishing the legal nexus between the state and the agency rests with the City, County or State Attorney General and their appropriate legal counsel.

STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to **training and**

evaluation activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
- 3. A lost communication procedures document that describes what action(s) the Pilot-in-Command (PIC) will take if there is loss of communication between PIC and Air Traffic Control, or lost communication between PIC and the Visual Observer(s) (VO).
- 4. An emergency procedures document that explains the protocols/procedures that will be executed at the site in the event of an emergency (this could include execution of procedures outlined in the manufacturers supplied operator's flight manual, other possible alternative courses of action available for each phase of flight, and any outside agencies or resources for medical and fire or other assistance) Basically, this is a .."What will you do if something bad happens?).

STEP THREE.

and evaluation. This on-site review will include:

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review

- A review of the agency's UAS training and proficiency program, to include all training records
- · A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- · An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free

to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6) Liaison Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6)

Sent: Friday, January 09, 2015 11:18 AM

To: (b) (6) Cc: (b) (6)

Subject: FW: LE UAS operations

Importance: High

Police Department

Regards,

(b) (6)

FAA Aviation Safety (AVS) UAS Integration Office (AFS-80)

(b) (6)

www.faa.gov/uas

From: (b) (6), (b) (7)(C)

Sent: Tuesday, January 06, 2015 11:09 AM

To: (b) (6)
Subject: LE UAS operations

Importance: High

(b) (6)

My name is (b) (6), (b) , I am the senior pilot at the Charlotte-Mecklenburg Police Department. I have been asked to attend a meeting tomorrow in reference to the possible purchase of a UAS for use here in Charlotte.

I have a few questions about operation restrictions with regard to Class B airspace.

Our city center is within the bounds of the surface area of KCLT.

Please call me if possible (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

Sincerely,

(b) (6), (b) (7)(C)

Charlotte-Mecklenburg Police Department Aviation Unit

(b) (6), (b) (7)(C)

From: (b) (6) To: (b) (6), (b) (7)

Cc: Steventon, John (FAA)
Subject: RE: Quad copter COA La Verne CA - law enforcement

Date:Monday, January 12, 2015 4:05:00 PMAttachments:COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx image002.gif

(b) (6), (b) (7)(C)

As a way of introduction, my name is (b) (6)

working for the Federal Aviation Administration Unmanned Aircraft

Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety

Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

The Federal Aviation Administration (FAA) is responsible for processing and approving all requests for Unmanned Aircraft System (UAS) operations in the National Airspace System (NAS). For "Public" UAS operators, this authorization is granted via the issuance of a Certificate of Waiver/Authorization (COA). Typically, Law Enforcement Agency sUAS flight operations are considered "public aircraft" operations. The guidelines for operating as a "public aircraft" entity are described in the FAA Flight Standards Information Management System (FSIMS) 8900.1 Volume 16. I have attached a word version of that on line document.

When the FAA receives an application for a COA through the FAA's "COA On-line" process, the Agency initiates a rigorous program review and application assessment. Included in this review and assessment are 1) the type of mission, 2) launch/recovery/operations location(s), 3) operational altitudes, 4) flight procedures, 5) communications, 6) emergency procedures such as lost communication and loss-of-control link, and 7) pilot in command (PIC), flight crew, and observer qualifications and training requirements. The typical COA application approval process is completed within 60 business days of receipt, provided there are no submittal errors, missing information, or safety or airspace issues.

THE FIRST STEP.

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STEP TWO.

The FAA believes that the safest and most successful jurisdiction-wide deployment of UAS technology supporting public safety agencies is accomplished through a two phase process. After the proponent has submitted the declaration letter and has received access rights to enter the COA On-Line website, they will submit their initial application (Phase I). The initial COA is generally restricted to **training and evaluation** activities at a specific training site that is confined to Class G airspace, remaining well clear of housing areas, roads, any persons, and watercraft. This permits agencies to conduct necessary ground

and flight training to bring pilots, observers and ground crew members to a high level of UAS flight proficiency and also enables them to develop and conduct training exercises to ensure efficient, standardized coordination among other supporting / responding emergency elements (e.g. coordination for operational LEA missions, search and rescue, disaster control, forensic photography, etc.).

Within the COA Application is a requirement for the proponent to attach several documents that need to be submitted. These documents include:

- An Airworthiness Release (AWR) statement from the Proponent's accountable executive
 acknowledging that the Proponent accepts all responsibility for ensuring that the UAS is airworthy
 and that the it will be operated and maintained in strict compliance with the manufacturer's
 operational and maintenance recommendations.
- 2. A lost-link procedures document that describes the specific lost-link procedure that will be implemented in the event of a lost-link occurrence (loss of command and control (C2) link).
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STEP THREE.

Once the Proponent has completed sufficient flight and scenario training and feels confident that its flight crew members can safely operate the UAS at a level of competency to safely support actual Law Enforcement missions, the Proponent will apply for their second "Operational" (Jurisdictional) COA (Phase II). The area of operation for this COA typically incorporates the agency's entire jurisdiction (city, county, etc.). As part of the operational COA approval, the FAA will conduct an on-site program review and evaluation. This on-site review will include:

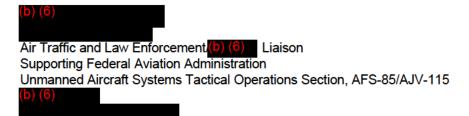
- A review of the agency's UAS training and proficiency program, to include all training records
- · A review of the agency's UAS Operating manual including the Standard Operating Procedures (SOPs) for each phase of flight operation from notification for deployment through preflight, launch, recovery, post-flight and mission record keeping. SOPs must include, at a minimum, emergency procedures and standards for expected scenarios (e.g. lost-link, lost communications between VO and PIC or between PIC and ATC, medical emergencies, etc.), Crew Resource Management, sterile ground control station protocols, PIC and VO standard communications and any special mitigation procedures
- A review of the agency's Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards (Note: The SRAP must include a description of specific risk controls the agency's will employ to mitigate any attendant hazard for UAS)
- An evaluation by the FAA of an actual UAS exercise to demonstrate the competency and safety of the agency's program.

The FAA's UAS Integration Office (UASIO) has provided a dedicated website (<u>www.faa.gov/uas</u>) that describes the COA process and an example of the application.

The most important piece is the public declaration letter that will need to be coordinated through the State Attorney General's Office, County or City Attorney (please review the attached email material on public declarations). The FAA cannot move forward and grant access to the COA On-line application web site until they have received the agency's public declaration letter.

I understand that the magnitude of this information may seem a bit daunting, but we developed this response to try and cover the questions that most interested agencies have starting out. Please feel free to contact Mr. John Steventon or me with any questions or if we may be of any further assistance.

Respectfully,



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From: (b) (6), (b) (7)(C)

Sent: Monday, January 12, 2015 12:46 PM

To: (b) (6), (b) (7)(C) (b) (6)

Subject: Quad copter COA La Verne CA - law enforcement

(b) (6), (b) (7)(C)

Thank you for your call . All law enforcement UAS are initially coordinated with and through (b) (6)

He will email information on how to start the process of getting a COA which is required for any law enforcement UAS activity.



(b) (6), (b) (7)(C)

La Verne PD, CA
(b) (6), (b) (7)(C)

Please call if you need anything else.

Thanks,

(b) (6)

Unmanned Aircraft Systems

(b) (6)

Operations Support Group AJV-W23 Lockheed Martin (NISC III) From: (b) (6)
To: (b) (6), (b) (7)(C)

Cc: (b) (6)

Subject: RE: UAS questions for local government
Date: Friday, January 09, 2015 2:55:00 PM
Attachments: COA Process Initial Itr Template.doc

Order 8900 1 Volume 16.docx

image001.jpg

(b) (6), (b) (7)(C)

Hemet Police Department (b) (6), (b) (7)

450 E. Latham Avenue Hemet, CA 92543

(b) (6), (b) (7)(C)

As a way of introduction, my name is working for the Federal Aviation Administration Unmanned Aircraft
Systems Tactical Operations Section, AFS-85. I am the Air Traffic Office (ATO) coordinator for all law enforcement (LEA) Fire, and First Responder Agencies that are interested in implementing Unmanned Aircraft System (UAS) technologies that need to be certificated by the FAA in order to operate within the National Airspace System (NAS). Along with my counterpart, Mr. John Steventon, an FAA Aviation Safety Inspector and the FAA's Unmanned Aircraft Systems Integration Office, AFS-84, we handle law enforcement/fire and first responder Agency UAS requests.

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until they have received the agency's public declaration letter.

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Respectfully,

(b) (6)

Senior Aviation Analyst

Air Traffic and Law Enforcement (b) (6)

Liaison

Supporting Federal Aviation Administration

Unmanned Aircraft Systems Tactical Operations Section, AFS-85/AJV-115

(b) (6)

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From: (b) (6)

Sent: Friday, January 09, 2015 11:01 AM

To: (b) (6)

Cc: (b) (6)

Subject: FW: UAS questions for local government

Police department.

Regards,

(b) (6)

FAA Aviation Safety (AVS)
UAS Integration Office (AFS-80)

(b) (6)

www.faa.gov/uas

From: (b) (6), (b) (7)(C)

Sent: Wednesday, January 07, 2015 2:42 PM

To: (b) (6)

Subject: UAS questions for local government

(b) (6)

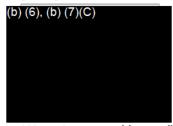
I was given your contact information for some of my questions. Our department is looking into utilizing UAS's during tactical operations and I have a lot of questions. I am looking at some clarification on licensing/certificate requirements and medical requirements for the PICs of the UAS.



(b) (6), (b) (7)(C)

Hemet Police Department
(b) (6), (b) (7)(C)

450 E. Latham Avenue Hemet, CA 92543 (951)765-2402



We strive to provide excellent customer service – please tell us how we're doing at http://cityofhemet.info